

Federal Reserve Bank of Richmond

*The
Federal
Reserve
at Work*

FEDERAL RESERVE BANK OF RICHMOND

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This pamphlet was written primarily to provide the layman with an understanding of the role of the Federal Reserve System in our nation's economy. The material was originally part of the 1960 ANNUAL REPORT OF THE FEDERAL RESERVE BANK OF RICHMOND. B. U. RATCHFORD and ROBERT P. BLACK were the authors of the original text, which has been subsequently updated by A. N. SNELLINGS.

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Objectives, Structure, and Functions

*Federal Reserve System Keeps Taut
Rein on Credit*

*Bank Reserves Boost Studied in Fed's
War on Inflation*

*Discount Rate is Raised; Reserve Board
Calls Boost Anti-Inflationary Move*

Banks Cut Borrowing From Fed



These captions from leading New York newspapers describe important Federal Reserve actions. Such moves naturally raise a number of questions. "What is the Federal Reserve?" "What does it do?" "How do its actions affect the economy?" "How does it establish policy?" "What are its aims?" "How effectively can it accomplish its objectives?" Answers to these questions lie at the heart of our nation's financial mechanism.

System Policy Objectives

The Federal Reserve System is the nation's central bank. Like other central banks throughout the world, its chief responsibility is to regulate the flow of money and credit in order to promote economic stability and growth. It also performs many service functions for commercial banks, the Treasury, and the public.

Its policy is aimed at providing monetary conditions favorable to the realization of four objectives: a high level of employment, stability in the overall price level, a growing economy, and a sound international balance of payments. System policy alone cannot, of course, achieve these objectives since many other factors also play important roles. Nevertheless, all System actions are made in an attempt to facilitate the attainment of these goals. As economic conditions shift, the System at times must change the emphasis placed on each of the four objectives, but all four are ever in mind. Policies of restraint and ease are but two phases of System efforts to achieve these ends.

The four goals are closely interdependent. Without high employment, an economy can neither remain prosperous nor grow. With persistent inflation, business practices become waste-

ful; speculation replaces productive activity; excesses leading to economic collapse may develop; and balance of payments problems are apt to arise. Chronic deficits in the balance of payments can so tie the hands of fiscal and monetary authorities that they cannot pursue, as actively as they would like, policies designed to stimulate employment or facilitate economic progress. Achievement of high employment, a stable price level, and a sound international balance of payments, however, promotes the kind of savings, incentives, and enterprise needed in a growing economy. Hence, System policies contributing to these three objectives also produce a monetary environment conducive to long-term growth.

Structure of the Federal Reserve System

The System has several important parts: member banks, the Federal Reserve Banks, the Board of Governors, the Federal Open Market Committee, and the Federal Advisory Council.

MEMBER BANKS At the base of the Federal Reserve pyramid are the System's approximately 5,750 member banks. All national banks must be

members, and state banks may elect to join if they meet certain requirements. Member banks held about 77 per cent of all commercial bank assets and deposits, although less than half the nation's commercial banks belong to the System.

There are two classes of member banks. Most banks, located in 46 centers designated by the Board of Governors as reserve cities, are classified as reserve city banks, and all other banks are called country banks. Until July 28, 1962, the larger New York and Chicago banks were called central reserve city banks, but now they are classed simply as reserve city banks.

Membership conveys many privileges but also involves obligations. Obligations include: holding specified reserves against deposits; subscribing to capital stock of the district Federal Reserve Bank; complying with various requirements of Federal banking law; paying at par customers' checks presented through the mail; completing necessary System reports; and in the case of State member banks, being examined and supervised by the Federal Reserve Banks.

Among the more important advantages a bank receives from System membership are the prestige of being a member bank and the privileges of borrowing under certain conditions from its district Federal Reserve Bank, using System check collection and wire transfer facilities, obtaining currency and coin free of transportation costs, receiving an annual cumulative 6 per cent dividend on its Federal Reserve Bank stock, participating in the System's functional cost analysis program, using the facilities of the Reserve Banks for safekeeping securities, and requesting information and receiving aid on various problems from the Federal Reserve staff.

FEDERAL RESERVE BANKS The country is divided into twelve Federal Reserve districts—each with a Federal Reserve Bank. There are also 24 Federal Reserve Bank branches serving particular areas within the districts. Cities with Federal Reserve head offices are: Boston, New York, Philadelphia, Cleveland, Richmond, Atlanta, Chicago, St. Louis, Minneapolis, Kansas City, Dallas, and San Francisco. These 36 Reserve Bank offices comprise the second level of the pyramid.

The corporate structure of Federal Reserve Banks resembles that of commercial banks. All issue capital stock, have boards of directors who elect their officers, have many similar official titles and departments, and obtain their earnings largely from interest on loans and investments.

There are three main differences, however, stemming from the Reserve Banks' responsibilities to the public. First, Federal Reserve stockholders do not have the full privileges and powers that stockholders of privately managed corporations usually have. Second, Reserve Banks are not profit-motivated, although they do earn large profits. Expenses and member bank dividends absorb some earnings, but most are turned over to the U. S. Treasury as "interest" on Federal Reserve notes. In 1970 dividends totaled \$41 million, and payments to the Treasury ran almost \$3.5 billion. Third, if the Reserve Banks should ever be liquidated, the Federal Government would receive any assets remaining after the stock was paid off at par.

Each Reserve Bank has three Class A directors, three Class B directors, and three Class C directors. Member banks elect both Class A and Class B directors by ballot. Those in Class A must be representatives of the member bank stockholders and usually are commercial bankers. Class B directors must be actively engaged in agriculture, industry, or commerce and may not be either bank officers, directors, or employees. Class C directors—one of whom is designated as chairman and one as deputy chairman of the board—are appointed by the Board of Governors. A Class C director may be neither a director, officer, employee, nor stockholder of any bank.

In addition to their regular duties in overseeing the operations of the Reserve Banks, the boards of directors also have certain duties in the field of monetary policy. First, they establish, subject to the approval of the Board of Governors, the discount rates Federal Reserve Banks charge on short-term loans to member banks. Second, they elect five of the presidents of the Federal Reserve Banks to serve as members of the Federal Open Market Committee. Third, they provide the Reserve Bank presidents and the Board of Governors with an invaluable source of "grass roots" information on business conditions.

BOARD OF GOVERNORS At the peak of the pyramid is the Board of Governors in Washington. It consists of seven members appointed by the President of the United States with the advice and consent of the Senate. Board members are appointed for fourteen-year terms and are ineligible for reappointment after having served a full term. No two Board members may come from the same Federal Reserve district. The Chairman and Vice Chairman of the Board are named by the President of the United States from among the Board members for a four-year term and can be redesignated.

One of the Board's important duties is supervision. The Board approves the salaries of all Reserve Bank officers, the appointment of Reserve Bank presidents and first vice presidents, and the budgets of Reserve Banks. The Board also examines Reserve Banks and branches each year to ensure compliance with regulations and proper control of expenditures. In addition, it coordinates System economic research and data collection and reviews all System publications. It must also approve acquisitions by bank holding companies, some bank mergers, and certain other commercial bank actions.

The Board's prime function, however, is the formulation of monetary policy. In addition to approving proposed changes in the discount rate, it has authority to change member bank reserve requirements within specified limits, to set margin requirements for the financing of securities traded on national security exchanges, and to set maximum interest rates payable on member banks' time and savings deposits. Even more important, members of the Board of Governors are also members of the Federal Open Market Committee and participate in the formulation and administration of open market policy.

FEDERAL OPEN MARKET COMMITTEE The Federal Open Market Committee—the System's most important policy-making body—is composed of the seven members of the Board plus the President of the New York Federal Reserve Bank and four other Reserve Bank presidents. Its main responsibility is to establish System open market policy—the extent to which the System buys and sells Government and other securities.

It also oversees the System's operations in foreign exchange markets. It ordinarily meets every three or four weeks but sometimes more often.

The "Trading Desk" of the New York Reserve Bank serves as the Committee's agent in making actual purchases and sales. Government securities bought outright are then prorated among the twelve Reserve Banks according to a formula based upon the reserve ratios of the various Reserve Banks.

Similarly, the foreign department of the New York Reserve Bank acts as the Committee's agent in foreign exchange transactions. Foreign currencies purchased in these operations are also prorated among the Reserve Banks.

OTHER COMMITTEES Several other committees also play significant roles in System operations. One is the twelve-man Federal Advisory Council composed of bankers, one from each of the Federal Reserve districts. Members are elected by the boards of directors of the Reserve Banks of their districts. The Council meets in Washington four times a year and advises the Board on important current developments. The Conference of Presidents and the Conference of Chairmen of the Reserve Banks also meet periodically to discuss System problems. In addition, several other System committees continuously review System operations and policy problems.

System Service Functions

Like most other central banks, the Federal Reserve performs many service functions for the public, the Treasury, and commercial banks.

FISCAL AGENCY FUNCTIONS The twelve Federal Reserve Banks act as the Government's principal fiscal agents. They hold the Treasury's checking accounts, receive applications from the public for the purchase of securities being sold by the Treasury, allot securities among bidders, deliver securities, collect from security buyers, redeem securities, wire-transfer securities to other cities, make denominational exchanges of securities, pay interest coupons, and assist the Treasury and other Government agencies in many other ways. The Reserve Banks receive no compensation for handling the Treasury's checking

accounts and redeeming its coupons, but they are reimbursed for most of the other fiscal agency work they perform. During 1970 the System handled for the Treasury about 276 million Government securities valued at more than \$1.4 trillion.

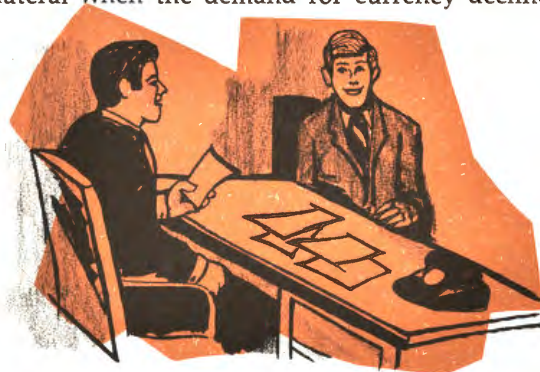
COLLECTION OF CHECKS AND NONCASH ITEMS Federal Reserve Banks also collect for the public vast quantities of bank checks and substantial amounts of noncash items such as drafts, promissory notes, and bond coupons. During 1970 the System processed almost 8 billion checks, totaling more than \$3.5 trillion, and 41.5 million noncash items, valued at over \$26.7 billion.



WIRE TRANSFER OF FUNDS The System also facilitates payments by making available to member banks a wire service that can be used to transfer funds quickly from one part of the country to another. For example, a Richmond buyer wishing to pay a New York seller the same day can have a member bank request the Richmond Reserve Bank to transfer the funds to the seller's bank. The Richmond Federal Reserve Bank deducts the funds from its member's reserve account, and the New York Federal Reserve Bank credits the reserve account of the New York member bank so that it in turn can credit the seller's bank account. The two Reserve Banks then settle by wire at the end of the day through the System clearing agency—the Interdistrict Settlement Fund in Washington. During 1970 the System made over 7 million wire transfers totaling about \$12.3 trillion.

HANDLING OF CURRENCY AND COIN The Federal Reserve Banks are the channels through which practically all cash moves into and out of circulation. When the public withdraws cash from commercial banks, the banks replenish their supply by obtaining shipments from the Reserve Banks. As the public's need for cash tapers off, banks return their surplus money and receive credits to their reserve accounts. During 1970 the System received and counted over 19 billion bills and coins valued at over \$47 billion.

NOTE ISSUE Nearly 90 per cent of the nation's "pocket money" is issued by the Federal Reserve Banks in the form of Federal Reserve notes. All Federal Reserve notes must be fully collateralized by Government securities, gold certificates, or certain other types of assets. When a Reserve Bank needs more currency to meet the demands of commercial banks, it can easily obtain additional Federal Reserve notes by pledging the proper collateral. Conversely, Reserve Banks can return the notes and recover their pledged collateral when the demand for currency declines.



OTHER SERVICE FUNCTIONS The Reserve Banks and the Board of Governors also provide many other service functions such as answering requests; distributing monthly business reviews and other publications; providing speakers for various occasions; and, upon request, assisting banks in solving problems.

System Influence on Economic Activity

System policy operates primarily through affecting the availability of bank credit and the money

supply and thereby the volume of spending. While the initial impact is felt by the commercial banking system, effects of monetary policy spread throughout the nation's entire financial mechanism because of the central role played by commercial banks in major loan and securities markets.

WHY COMMERCIAL BANKS ARE DIFFERENT Commercial banks play a key role in monetary policy because they alone among financial institutions can "create" new money. Other financial institutions merely transfer existing money to borrowers when they make loans or investments. The commercial banking system, however, can increase the money supply by paying out cash or setting up new demand deposits when it expands its earning assets. Demand deposits are by far the more important of the two, constituting nearly 80 per cent of the total and accounting for an estimated 90 per cent of all payments.

Of course, not every increase in commercial bank earning assets results in an equal rise in the privately held money supply—that portion of demand deposits and cash held by the public. Sometimes other types of deposits such as time, Government, or interbank rise instead. Generally, however, an expansion in bank earning assets increases the privately held money supply.

Here's how the process of money creation works. Assume that the Federal Reserve buys Government securities from a dealer, crediting the reserve account of the dealer's bank in payment. Since commercial banks are profit-motivated, that bank will then probably use its new reserve funds to expand earning assets. Whether it makes loans or investments, deposits or cash outside banks will increase. If the bank makes loans, it will probably create the new money by crediting its borrowers' demand deposits. If it purchases securities, deposits will rise when the security dealer deposits the funds received from the bank.

If these new deposits are checked out to other banks, reserves of these banks will increase and those of the dealer's bank will decrease. The banks holding these new deposits must then set aside part of their new reserves to meet reserve requirements against their additional deposits

but will be able to lend or invest approximately the remaining amount. As they expand earning assets, deposits and possibly public cash holdings will rise still further. Another part of the new reserves will be used to meet reserve requirements against these additional deposits, but some excess reserves will still be available for further loan or investment expansion. Eventually, the process ends when deposits rise to the point that banks must use all the new reserves in meeting reserve requirements. By this time, however, deposits will have increased by several times the original addition to bank reserves.

THE KEY ROLE OF MONEY Money is unique in that nothing else is generally acceptable in payment for goods and services. Other assets such as savings deposits, short-term Treasury securities, and savings and loan shares so closely resemble money that they often perform some of the functions of money. Nevertheless, such assets cannot be spent directly. They must first be converted into cash or demand deposits if a holder is to buy something in place of them.

Rising economic activity involves increasing expenditures, and rising expenditures require either additional money or a higher monetary velocity—the rate at which money is spent on goods and services. If expenditures, financed with either new money or rising velocity, increase faster than the flow of goods and services, inflation results. If expenditures do not keep pace with the flow, demand is insufficient to prevent recession. Thus, a sound economy requires the "right" amount of spending. Since money plays such a key role in the spending process, it is essential that the banking system create neither too much nor too little new money.

THE IMPORTANCE OF BANK RESERVES To a large extent, changes in the volume of bank reserves determine the amount of money banks can create. When reserves increase, banks have an incentive to acquire additional earning assets, which expands deposits or cash outside banks. Conversely, a reduction in reserves usually forces banks to cut back loans and/or investments, thereby reducing deposits and cash outside banks.

The extent to which banks can expand the privately held money supply on the basis of new

reserves varies according to a number of factors. Normally, the lower the reserve requirements, the larger the expansion since less reserves are required for each dollar of deposits. The more "pocket money" expands the smaller the increase, since banks must draw down reserves to obtain cash for their customers. Changes in the volume of deposits that are not part of the private money supply—interbank, Government, and time deposits—can also have important effects by either absorbing or releasing reserves. In addition, shifts of reserves between country and reserve city banks affect credit creation since the two groups hold varying percentages of reserves against deposits. Finally, variations in the volume of excess reserves that banks choose to maintain can increase or decrease expansion limits.

Despite all these variations an increase in the volume of reserves generally results in the creation of additional money, and a decline in reserves usually leads to a reduction in the money supply. Consequently, the Federal Reserve can affect interest rates, the money supply, and the availability of bank credit through its control over the volume of bank reserves. Because the banking system plays such a vital role in the credit mechanism, such effects generally spread throughout all credit markets.

The Impact of Monetary Policy

EFFECTS ON THE DOMESTIC ECONOMY

Monetary policy affects domestic expenditures by influencing the behavior of three different groups: lenders, borrowers, and nonborrowing spenders.

Probably the most important effect is its influence on the availability of lenders' funds. During some periods, for instance, the System may observe inflationary pressures developing as the public's demand for goods and services exceeds the available supply. Since part of this demand is always financed by credit, the System at these times adopts a policy of restraint to try to prevent the volume of loanable funds from increasing as fast as the demands for credit rise.

During these periods, lenders may take two types of action to balance credit demands with

their available supply of loanable funds. First, they may increase their prices—the interest rates they charge. In many cases, however, interest rates do not rise enough to prevent borrowers' demands from outrunning available funds. Thus, lenders, in addition, often "ration" credit among borrowers by various means—raising their standards of credit worthiness, requiring larger down payments or larger compensating balances in order to limit their available funds to the best credit risks. Marginal borrowers consequently cannot expand their spending since they are unable to obtain as much credit as they want even though they are willing to pay existing interest rates.

On the other hand, the System at times may consider it appropriate to increase the availability of credit to give a boost to total expenditures. This "easy money" policy provides lenders with funds to accommodate marginal borrowers, previously part of the "unsatisfied fringe of borrowers," and also encourages lenders to reduce interest rates to attract still more borrowers.

Borrowers' credit demands are affected in several ways. When money tightens, some demands—nobody knows exactly how many—are undoubtedly cut back because higher interest rates discourage some marginal projects. The expected difficulty of obtaining the desired credit accommodation also may deter borrowers who have doubts about being able to obtain sufficient funds to complete their projects even though initial financing is available. Legal interest rate ceilings on GI loans and some State and local bond issues also cut borrowers' demands by removing potential home buyers and governments from the market when prevailing rates exceed the amounts they can legally pay. Portfolio losses, such as declines in bond prices resulting from higher rates, may likewise discourage potential borrowers from undertaking projects. Conversely, easy money can stimulate borrowers' demands by lowering rates, by fostering expectations that funds will be more readily available, and by creating "paper" portfolio profits.

Tight and easy money can also influence the attitudes of spenders who neither borrow nor lend. An effective tight money policy may, for instance, dampen inflation psychology and cause the postponement of some outlays that might

otherwise have been made in anticipation of price increases. In addition, it may cause certain spenders to reduce expenditures by causing portfolio losses in their security holdings. Conversely, easy money can stimulate outlays by fostering a “things-will-get-better” atmosphere and by creating paper profits in spenders’ portfolios.

EFFECTS ON THE BALANCE OF PAYMENTS

Monetary policy affects not only domestic expenditures but also, directly and indirectly, international trade and international capital movements. Tight or easy money may have direct effects on the availability of credit to foreign borrowers from U. S. banks and other U.S. lenders and investors. Indirect effects may be complex and varied. Generally speaking, however, actions that encourage noninflationary growth of the domestic economy contribute also in the long run to a healthy balance of international payments.

THE TOOLS OF CREDIT POLICY

The Federal Reserve has two types of tools with which it can affect the level of domestic economic activity and the basic balance of international payments: quantitative or general credit controls and qualitative or selective controls. Quantitative controls influence the money supply, interest rates, and the overall availability of credit. Qualitative controls, however, are directed at a particular kind of credit. The System’s principal quantitative tools are: changes in the discount rate, changes in reserve requirements, and open market operations. At present the System’s only strictly qualitative controls are changes in margin requirements on securities listed on national securities exchanges. The System also has two other tools that are partly quantitative and partly qualitative. One is the setting of maximum interest rates payable on time and savings deposits at member banks. The other is the buying and selling of foreign currencies in the foreign exchange market.

THE DISCOUNT RATE

Perhaps the best known of the quantitative tools is the discount rate—the interest rate charged member banks on loans from Federal Reserve Banks. Member banks can borrow in two ways: by giving their own secured notes or by rediscounting drafts, bills of exchange, or notes from their portfolios. In practice,

borrowing banks usually use their own notes secured by Government obligations.

Changes in the discount rate must be made separately by each Federal Reserve Bank since the Bank’s directors initiate the change. Generally, all Reserve Banks act at about the same time, however, since all make their decisions on the basis of the same sort of evidence. Differences in timing result mainly from variations in the meeting dates of the twelve boards of directors. The initial change is the important one, however, since buyers and sellers in the market generally expect that other Reserve Banks will soon take similar actions.

Certain vital effects of changes in the discount rate are psychological. Such effects are particularly important when observers feel the discount rate is being used by the System to signal a shift in the direction of policy. In such cases, the financial markets react immediately—sometimes even in advance of System actions—when the move is anticipated. If the rate is increased, interest rates—particularly those on short-term securities—generally rise, and credit markets tighten. Conversely, a cut in the discount rate that clearly signals an easing of policy is ordinarily followed by easier conditions in the money and capital markets. At times, however, the System nudges credit markets first with its open market operations and changes discount rates only to bring them into line with other money rates. Such changes are often “discounted” in advance and thus have little immediate effect on the money market.

Changes in the discount rate also have some direct effects on short-term interest rates by making borrowings from the central bank either more or less costly. When the discount rate is increased, banks are more inclined to adjust their reserve positions by selling short-term Government securities rather than through expanding their borrowings at the Federal Reserve. The increased sale of securities tends to lower security prices and raise their yields. These higher market yields in turn tend to push up longer-term interest rates.

On the other hand, if the discount rate is lowered during an easy money period, banks are likely to maintain borrowings at the Federal Re-

serve's discount window at a higher level than would otherwise be the case. This tends to push rates lower by encouraging banks to hold larger quantities of Government securities.

OPEN MARKET OPERATIONS Open market operations are the System's most important credit tool. Operations are conducted primarily in Government securities, but the System also buys and sells bankers' acceptances. Both kinds of securities may be purchased either outright or under repurchase agreements requiring the dealers to buy back the securities within a few days.

Security purchases and sales directly affect the volume of member bank reserves and, consequently, the overall cost and availability of credit. When the System buys securities, it credits the reserve account of the seller's bank, and the bank in turn credits the seller's bank account. As a result of the increase in reserves, the banking system can expand credit by a multiple amount. Conversely, System sales reduce reserves and, if ever conducted in large volume, would force banks to contract credit.



Open market operations are either defensive or dynamic. Defensive operations are those taken to offset other factors that change the volume of member bank reserves. If, for example, gold outflows or increases in Treasury deposits at the Reserve Banks are tending to reduce member bank reserves, the System may make offsetting Government security purchases even though it is not trying to ease credit policy. Conversely, when it wishes reserves to drop during a slack season, it may buy securities if other factors are tending to

reduce reserves too fast. Thus, it is impossible to tell from a sale or a purchase whether the System is tightening or easing unless one knows how other factors are affecting reserves.

Dynamic operations consist of either causing or permitting changes in banks' reserve positions in order to stimulate economic activity or prevent inflation. Even when the System conducts dynamic operations, it often must take defensive measures as well so that the dynamic policy can proceed smoothly.

RESERVE REQUIREMENTS The tool with the most immediate and widespread impact is the Board's power to vary member bank reserve requirements within specified limits. On time deposits, the limits are 3 per cent to 10 per cent for all member banks. On demand deposits, they are 10 per cent to 22 per cent for reserve city banks and 7 per cent to 14 per cent for country banks.

Changes in reserve requirements affect member bank actions in two ways. First, they either destroy or create excess reserves by changing the amount of reserves required against existing deposits. Reductions in reserve requirements release reserves and generally bring about an expansion in bank credit and the privately held money supply. Increases in requirements have the opposite effect. Second, changes in requirements alter the amount of deposits a given volume of reserves can support. If reserve requirements are 10 per cent, \$1,000,000 in additional reserves can support up to \$10,000,000 of new deposits. If requirements are 20 per cent, however, the additional reserves cannot support more than \$5,000,000 of new deposits.

MARGIN REQUIREMENTS The Federal Reserve Board also has the right to set margin requirements—the percentage down payment required when borrowing to finance purchases or holdings of securities listed on national exchanges. There are three separate regulations—Regulations T, U, and G. Regulation T covers brokers' or dealers' loans to customers. Regulation U regulates commercial bank loans to brokers, dealers, or other customers. Regulation G governs loans of other lenders.

Margin requirements are directed at only one type of credit—that used to finance security pur-

chases and holdings. If expansion of security loans appears to be a factor in undue increases in security prices, requirements can be raised. At other times, when there seems to be little danger of speculation, the System cuts requirements since it prefers not to interfere with the allocation of credit among different sectors of the economy.

INTEREST CEILINGS ON TIME AND SAVINGS DEPOSITS The Board also can use its ability to set interest ceilings on member bank time and savings deposits to influence the overall level of economic activity. The rates are specified in the Board's Regulation Q. Rates must be set in consultation with the Federal Deposit Insurance Corporation, which sets ceilings on rates paid at nonmember insured banks, and the Federal Home Loan Bank Board, which sets ceilings on dividend rates payable by its member and other insured savings and loan associations.

Since the Board has the freedom to set many combinations of ceilings, there are numerous ways in which the control can be used. If, for example, the Board wishes to slow down the rate of growth in bank credit, it can refuse to raise the ceilings payable on certificates of deposit when competitive rates are moving up and thus restrict the ability of banks to compete for time money. If it wishes to lower long-term rates at the expense of short-term rates, it can raise such ceilings and enhance the ability of banks to channel funds into the long-term market.

FOREIGN EXCHANGE OPERATIONS Since early 1962 the System has also been conducting foreign exchange operations. Foreign exchange balances can be acquired either by purchases in the market or through "swap agreements" with foreign central banks under which the foreign central banks credit the System's account on their books in terms of their own currency in return for like dollar credits on the books of the Federal Reserve.

The System can use such foreign balances to buy from foreigners temporary holdings of surplus dollars that might otherwise result in unnecessary gold outflows, to prevent disorderly speculative capital movements from undermining

confidence in the dollar, and to assist foreign monetary authorities in fighting inflation resulting from an inflow of funds. Such measures cannot cure a basic balance of payments problem, but they can provide a temporary respite during which a permanent solution can be sought. System actions to promote a healthy domestic economy can, however, contribute to a permanent solution: (1) by enabling us to compete more successfully in foreign markets and (2) by discouraging excessive outflows of capital resulting from international differences in financial market conditions.

Since System exchange operations have important impacts upon foreign countries as well as upon the United States, they are conducted in close cooperation with foreign monetary authorities. There is also close coordination with Treasury officials since the Treasury also operates in foreign exchange markets. Such cooperation is facilitated by the New York Reserve Bank's role as agent for the Treasury in its foreign exchange operations.

COORDINATION AMONG CREDIT CONTROLS Except in the case of defensive open market operations, the Federal Reserve's credit control tools are seldom employed independently of each other. To the contrary, all are coordinated toward the same end—the System's current policy objectives. Thus, it is usually not meaningful to speak of "open market policy," or "discount rate policy," or "reserve requirement policy." Instead, it is more correct to view monetary policy as a broad program embracing the three quantitative controls, margin requirements, and any System foreign exchange operations. Action with respect to any single control is always taken in the light of prior or planned action concerning the others.

In selecting various combinations of policy actions, the Federal Reserve considers both psychological and direct effects of its decisions. If it is felt that a psychological effect is needed to reinforce the direct effects, policy measures may well include changes in reserve requirements or the discount rate since these actions are specifically announced whereas open market operations are not. Such changes, of course, cannot be made too frequently without prejudicing their usefulness.

This is especially true of changes in reserve requirements because of their large direct effects on bank reserve positions. These limitations on the use of discount rate and reserve requirement changes place a greater burden on open market operations as a tool for attaining policy goals.

The right combination of policy moves necessary to achieve a given end depends on many factors. Policymakers must consider not only domestic economic developments but also the direction and strength of the last policy actions, the length of time since the last moves, the differential impact of alternative policy measures on the structure of domestic interest rates, the country's balance of payments position, and the relationships between domestic and foreign interest rates. These factors are constantly changing, and, consequently, the optimum policy combination for achieving a given end varies from one period to the next. Thus, monetary authorities must have considerable latitude in the extent to which they use the various tools. While the choice between alternative paths to a given policy goal is secondary to the problem of setting goals, it is an important aspect of monetary policy because of the interdependence of the various policy tools.

The Policy-Making Process

THE POLICY FORUM The meetings of the Federal Open Market Committee are the System's main policy forum. There both Board and Bank representatives meet regularly to discuss economic developments and reach a policy decision for the weeks immediately ahead. In addition to members of the Board and the five presidents currently serving on the Committee, the remaining Reserve Bank presidents, the manager of the open market account and one of his principal assistants, the special manager of the open market account who handles foreign exchange operations, several Board senior staff members, and the senior economist from each of the Reserve Banks ordinarily attend. In this manner, not only Committee members, but also those presidents who will soon serve on the Committee, the chief advisers to the Board and the presidents, and those who implement the Committee's day-to-day open market policies are always well informed on current policy actions. Cumbersome

as this may seem, it nevertheless constitutes probably the smoothest and most efficient way of utilizing the unique contributions of diverse parts of the System to reach the best-informed policy judgments.

PREPARATION FOR THE MEETING Prior to the meeting, each participant arms himself with the best available data on domestic and international business conditions and the effects of current Federal Reserve policy. Board members and the presidents receive a steady flow of information and analyses from the research departments of the Banks and Board and their personal contacts with business, academic, government, and other sources.

Typical of the information sifted and analyzed are statistics on new orders, business incorporations, construction contract awards, retail sales, unemployment, employment, industrial production, personal income, business failures, foreign exchange rates, international reserves, foreign and domestic interest rates, the international balance of payments, the money supply, foreign and domestic prices, Government receipts and expenditures, member bank reserves, inventories, State and local government borrowings, bank loans and investments, business and consumer spending intentions, the turnover of demand deposits, and numerous other indicators. In short, by the time the Committee meets, every participant is well prepared to contribute to intelligent policy decisions.

THE INTERCHANGE OF OPINION Committee meetings generally fall into two parts—a discussion of recent developments and the formulation of policy for the period ahead. The special manager in charge of the System's foreign exchange operations leads off, reviewing important developments in foreign exchange markets and summarizing the System's foreign exchange operations. Next, the manager of the open market account reviews the Trading Desk's experience in implementing open market policy since the last meeting. Senior members of the Board's staff then summarize important domestic and international business and financial developments, stressing particularly any new developments that

might not yet have come to the attention of Committee members.

After the presentation of the Board's staff members, each Board member and president gives his interpretation of business conditions and makes policy recommendations for the period ahead. Presidents also contribute any significant "grass roots" information they have concerning regional developments.

BETWEEN MEETINGS Between meetings Board members and presidents keep in daily touch with the Trading Desk at the New York Bank. One important means is a detailed phone call around 11 A.M. on business days between senior members of the Board's staff; sometimes the Governors themselves; the officers managing the open market account; and, on a rotating basis, one of the president-members of the Committee. Among the factors discussed are developments in markets for Government and other securities, the tone of the money market, the reserve positions of member banks, inventories of Government security dealers, and the probable course of action to be taken by the Trading Desk. Shortly

after the conversation, a senior member of the Board's staff summarizes the content of the conversation in a memorandum for Board members and a telegram for presidents. Thus, any member of the Open Market Committee has ample opportunity to raise with the manager of the account and other Committee members any questions he may have concerning the contemplated action.

In addition, the Desk prepares daily wires summarizing conditions at the opening and closing of the securities markets and numerous written memoranda describing the Desk's operations. Some of these written reports are daily, some weekly, and some less frequent.

Committee members also keep close tab on System foreign exchange operations. A senior Board staff member prepares a daily memorandum for Board members and a daily telegram for each president describing exchange market conditions, exchange rates, and recent System and Stabilization Fund operations. In addition, the special manager prepares for Board members and presidents weekly, tri-weekly, and other periodic memoranda describing similar developments.

Federal Reserve Policy in Action

How does Federal Reserve policy work in practice? The period from early 1960 through 1970 affords some particularly good examples since it covered economic conditions ranging from a mild recession to a long period of remarkable growth and prosperity, culminating in a mild inflation, followed by a period of adjustment, and ending in a period of strong inflation. In this long period, the System used all of its conventional tools, sometimes with modifications, and devised some new ones as well.

Background: Economic Developments in the Early 1960's

BACKGROUND The decade of the sixties entered on a note of strong confidence and optimism. The economy had rebounded vigorously from the 1959 steel strike, and both consumer and business demands were strong. Prices were stable, and forecasts were glowingly optimistic. Early in 1960, however, the pace of the advance began to falter. The peak of activity was reached in May 1960, and the economy slid into a recession that lasted until February 1961.

It was a very short and mild recession. The decline in GNP was barely measurable, and personal income actually rose slightly. Industrial production fell by about 6 per cent, and business expenditures for new plant and equipment dropped somewhat more. Housing starts held up well, and new construction expenditures rose significantly.

In spite of the relative mildness of the recession, however, two developments were important and troublesome. First, total employment fell by about a half million, the number of unemployed rose by a million and a quarter, and the rate of unemployment rose from 5.1 to 6.9 per cent. Second, the deficit in our balance of payments, which had been large for some time, rose further. In October 1960 wild speculation drove up the London gold price. Over the whole period our gold stock declined about \$2 billion.

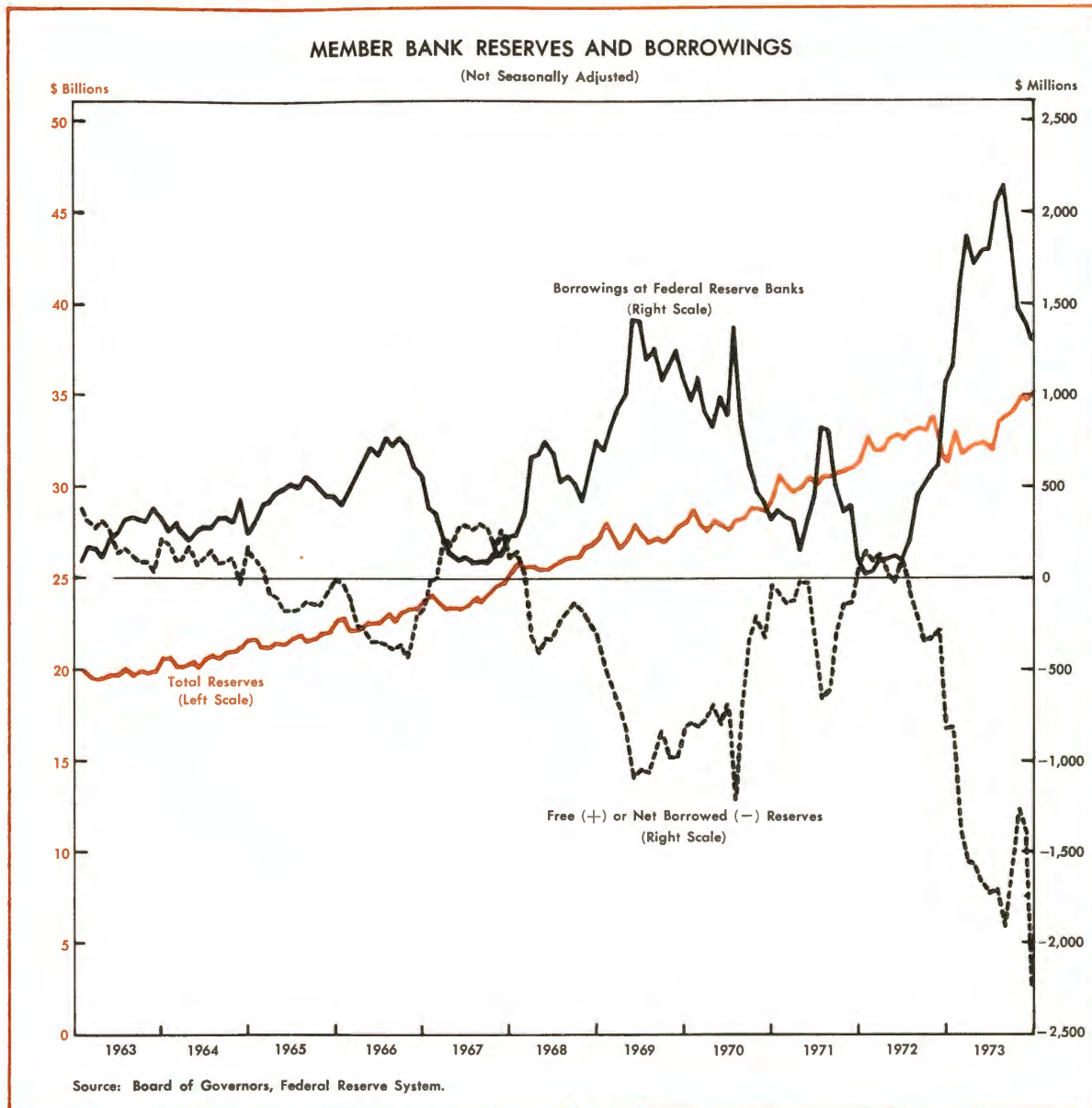
The period of recovery, following the trough in February 1961, can be divided into two main periods. The first period, running through July 1963, was one of slow but smooth and well-balanced recovery. There was a distinct lull in the

second half of 1962, but the upward movement regained impetus early in 1963. The growth in GNP was a low 3.3 per cent in 1961 but rose to 7.7 per cent in 1962 before dropping back to 5.4 per cent in 1963. Wage increases generally did not exceed productivity gains and prices were stable except for a slow upcreep of consumer prices. Employment rose slowly during the first year of recovery, and unemployment fell to a level of about four million, or 5.6 per cent of the labor force. Thereafter, increases in employment nearly matched additions to the labor force, and over the next two years there was little change in the level or rate of unemployment.

From July 1963 to November 1964 the economy moved ahead at a strong pace. GNP, personal income, and retail sales all showed healthy growth. Paced by a record production of automobiles, industrial production expanded at an increasing rate. Business investment expenditures had lagged throughout the first two years of recovery, but in early 1963 these outlays began to rise sharply. Employment continued its steady growth, and in the last half of 1964 unemployment moved down from its plateau, with the rate touching 5 per cent at year-end. Prices showed no significant movements. The deficit in the balance of payments, which continued to be a major source of concern, rose very sharply in the fourth quarter of 1964.

MONETARY POLICY

BACKGROUND Even before the peak was reached in 1960 the System detected signs of the slowdown and began to ease credit. This policy of ease continued through November 1964, al-



though toward the end of the period the System began to move gradually toward less ease. The policy of ease, however, was carried out in a very difficult environment. Gold was flowing out of the country, and interest rates in Europe were high relative to those in the United States. To avoid stimulating the outflow of liquid funds, and thus enlarging the outflow of gold, easing would have to be accomplished without pushing interest rates in the United States to excessively low levels. Open market operations were used

throughout this period to provide reserves to the banking system, but these operations exerted direct downward pressure on short-term interest rates. Thus, the System made an effort to supply reserves by means other than open market operations and tried in other ways to minimize downward pressures on short-term interest rates.

RESERVE REQUIREMENTS One method used involved a change in the legal reserve requirements of member banks. The first change, car-

ried out between December 1959 and November 1960, allowed banks to count vault cash toward meeting reserve requirements. The second move was to reduce the reserve requirements of central reserve city banks against demand deposits from 18 to 16½ per cent. The 16½ per cent requirement was the same as that applied to reserve city banks, and in 1962 the two categories were merged. Since country banks had gained most from the vault cash change, their reserve requirements were raised from 11 to 12 per cent. In late 1962 the reserve requirement against time deposits was reduced from 5 to 4 per cent.

OPEN MARKET OPERATIONS "Operation Twist," as it was called, was another technique devised during this period to avoid downward pressures on short-term rates resulting from open market operations. This involved engaging in open market operations in the intermediate- and long-term maturity ranges. For some time open market purchases had been limited, except in unusual circumstances, to short-term bills. In 1960 purchases were made of securities with maturities up to 15 months, and over the next several years the System extended its practice of buying securities with longer maturities, some running beyond five years. During 1961 and 1962 purchases of securities with maturities in excess of one year amounted to nearly \$4.5 billion. It was hoped that this would help to hold up short rates, thus reducing the outflow of liquid funds, and to restrain the rise in long rates, thereby contributing to the domestic economic recovery.

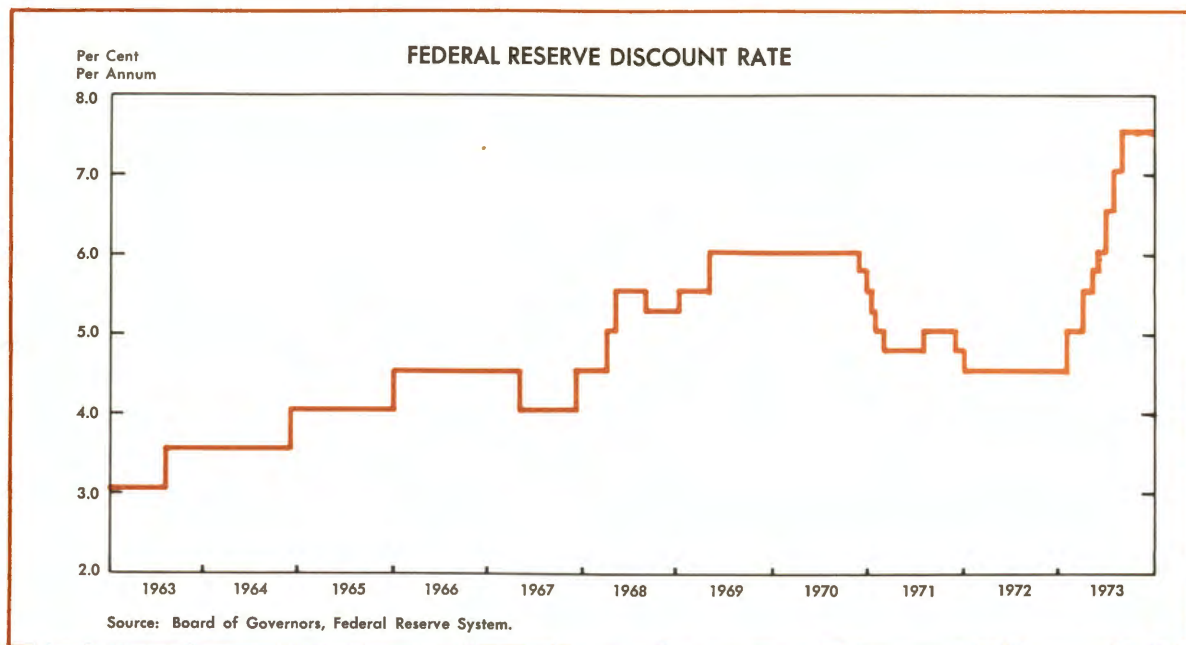
REGULATION Q The policy of holding up or encouraging a rise in short rates was reflected in System policy actions with respect to both Regulation Q and the discount rate. Early in 1961 New York banks had taken the lead in developing a new kind of financial instrument—the large-denomination, negotiable certificate of deposit. It was, at the same time, a money market instrument and evidence of a time deposit in a bank. Development of this instrument represented a large step toward the evolving practice of commercial banks, especially the large money market banks, managing their money positions from the liability rather than the asset side of the balance sheet. Development of the CD was to have far-

reaching effects on the flow of funds and on the implementation of monetary policy.

As short-term interest rates rose, the rates banks had to pay on CD's and other time deposits approached the ceiling rates under Regulation Q. To avoid putting undesirable pressure on bank reserve positions through a run-off in time deposits, those ceiling rates were raised in January 1962, July 1963, and November 1964. One consideration involved in these changes was the ability of banks to attract foreign deposits. In 1962 time deposits of foreign governments and financial institutions were exempted from the regulation.

THE DISCOUNT RATE The discount rate was reduced twice in the early recession months of 1960, but later on changes in the rate were related to other policy measures designed to slow the outflow of short-term capital. By the second quarter of 1963, for example, it became apparent that action was urgently needed to curb the rapidly rising outflow of funds. Action was taken on several fronts. Parts of the "package deal" were the raising of Regulation Q ceilings and the imposition of what was called an "interest equalization" tax. A third and important part of the package was an increase from 3 to 3½ per cent in the discount rate in July 1963. But by November 1964 short-term market rates were near to or above the discount rate, interest rates in Europe were high and rising, and the deficit in our balance of payments and the gold outflow were increasing rapidly. So in November 1964 the discount rate was raised from 3½ to 4 per cent. The immediate cause of this move, however, was the sterling crisis and the sharp increase in the English Bank Rate.

A NEW TOOL The gold speculation of 1960, the large outflows of gold, and continuing threats to the orderly operation of foreign exchange markets led to the development of a new tool of monetary policy. After long deliberations the Federal Open Market Committee, in February 1962, authorized an arrangement whereby the System might engage in foreign currency operations. The purposes were several: (1) to offset or compensate destabilizing fluctuations in the flow of international payments, especially if caused by temporary or speculative factors; (2) to temper



and smooth out sharp changes in foreign exchange rates; (3) to supplement international exchange arrangements; and (4) to provide for reciprocal holdings of foreign currencies which might contribute to international liquidity. The arrangement is a means whereby central banks of several countries may, in cooperation, provide for the international area some of the services that a central bank provides for its own country. In time of crisis or great stress large resources can quickly be assembled to meet a threat to monetary stability. The arrangement cannot correct any basic maladjustment in the balance of payments, but it may prevent gold losses or large payment flows due to temporary or speculative movements.

Under the administration of a Special Manager at the Federal Reserve Bank of New York, reciprocal currency or "swap" agreements were arranged with the central banks of the leading countries of the world. Under these agreements either the System or the other central bank involved in a particular situation may draw on the other up to the amount of the established line. This means, in effect, that the bank with a balance to settle can borrow to get the funds rather than paying gold or using existing funds, if any. If the cause of the payments imbalance is temporary and is soon reversed, the transaction can

easily be liquidated. If the imbalance persists, it is expected that the drawing will be funded in some other form and the proceeds used to repay the drawing or, if necessary, that the amount will be paid in gold.

The network of swap agreements proved to be very useful during the latter part of this period, with total drawings of \$2 billion during the year 1964. Most of this was initiated by foreign central banks, especially the Bank of England. The System made fewer drawings than in earlier years and at one time in early 1964 it had repaid all drawings. In addition, the network served as a nucleus around which a "credit package" of \$3 billion was quickly organized in November 1964 to provide emergency assistance to the pound sterling.

FISCAL ACTION Three tax changes were proposed to stimulate employment. One granted more liberal depreciation allowances, a second allowed a tax credit for new investments, and a third reduced substantially corporate and individual income taxes. The first two became effective in 1962, but the third was not enacted until 1964. With these aids, corporate profits rose rapidly and stimulated business investment. Spending for new plant and equipment, early in 1963, started a long and steep rise.

To stem the outflow of private funds the President, in July 1963, proposed a substantial tax on foreign investments, known as the interest equalization tax. The tax was not levied until the following year but was retroactive to the date it was proposed and was effective immediately in reducing sharply the outflow of funds. This helped to prevent a rise in the deficit but did little to reduce it.

In addition to these steps, the Federal budget provided stimulation in the form of a substantial cash deficit each year.

Inflation Appears *November 1964 - December 1965*

THE ECONOMY

During this period the tempo of activity stepped up considerably in almost every sector of the economy. In employment, industrial production, GNP, personal income, retail sales, and construction, rates of growth exceeded the high levels of 1964 and set new records.

Thus, the economy operated under forced draft for much of 1965. As inflationary pressures mounted, the usual earmarks of inflation began to appear—a longer workweek in manufacturing, a rising level of unfilled orders, faster accumulation of inventories, and, of course, rising prices. The index of wholesale prices, which had been almost completely stable for eight years, rose by 2 per cent in 1965, while consumer prices increased their rate of advance.

Total employment increased by 2.6 per cent—the largest increase during the expansion. Unemployment dropped steadily and by year-end was down to about three million, or 4 per cent of the labor force. Gains in labor productivity dropped while increases in wage rates quickened.

Rising business investment contributed substantially to the mounting pressures. Previously, such investment had been financed mainly from corporate profits. Although those profits continued upward, they were inadequate to finance all such investments in 1965, and corporations had to turn increasingly to banks and the capital market for funds at a time when the demand for funds from other sources was increasing.

FISCAL ACTION Fiscal action by the Federal Government contributed substantially to the increase in total demand. At the beginning of 1965 the second step of the 1964 tax reduction became effective. In addition, Congress enacted a substantial reduction in excise taxes. In July our commitment in Vietnam was greatly increased, but no increase in revenues was provided to cover it. In September a substantial increase in social security benefits, including a large retroactive payment, became effective. An increase in payroll taxes to cover the added expenditures was delayed until January 1966. Finally, military and civil service pay scales were increased in October. These extra demands of the Federal Government were superimposed on an economy already operating at or, in some cases, beyond its optimum rate of utilization.

MONETARY POLICY

BACKGROUND The demand for credit was intense during this period. Although the System moved slowly toward a policy of restraint, member bank reserves, bank credit, and the money supply increased at faster rates than before. Interest rates rose substantially, with the exception of those on bank loans and mortgages, which changed little. Money market banks continued to attract large amounts of funds by the sale of negotiable CD's. Bank borrowing from the System rose sharply to over \$500 million, and free reserves gave way to net borrowed reserves. Money in circulation continued to grow.

OPEN MARKET OPERATIONS Again in this period monetary policy was implemented mainly through open market operations. Despite the policy of restraint and the increased bank borrowing, purchases were made at a faster rate than in any previous period of the expansion. In large part, this was necessary to offset larger gold outflows and the constantly rising volume of currency outstanding. System holdings of U. S. Government securities increased by \$4 billion in 13 months to reach \$40.8 billion.

REGULATION Q CEILINGS As credit conditions tightened and interest rates rose, the rates paid on negotiable CD's moved up steadily and by late 1965 were pushing hard against their ceilings. In early December, in conjunction with

the increase in the discount rate, the network of ceilings was again raised.

THE DISCOUNT RATE By November 1965 inflation was clearly gaining momentum, and most market rates were well above the discount rate. What fiscal action the Federal Government might propose in the budget to be presented in January was uncertain. Further, Treasury financing in that month would interfere with decisive action by the System. These and other considerations led to the increase in the discount rate from 4 to 4½ per cent early in December.

FOREIGN CURRENCY OPERATIONS The System used and extended its network of swap agreements with foreign central banks in 1965. The principal reason for its use was recurrent speculative attacks on the pound sterling. The interest equalization tax, as proposed in 1963 and adopted in 1964, did not apply to bank loans. Late in 1964 and early in 1965 bank loans to foreigners increased tremendously, and it was suspected that they were being used largely as a substitute for security issues. In February 1965 President Johnson extended the tax to bank loans and at the same time inaugurated the Voluntary Foreign Credit Restraint Program. Under this Program, which was administered by the System, banks and other financial institutions were asked to keep outstanding credits to foreigners in 1965 to a level not more than 5 per cent above amounts outstanding at the end of 1964. The System issued guidelines for both groups of institutions. Influenced by the tax, the Voluntary Program, and higher interest rates in this country, the deficit in our balance of payments fell sharply in 1965 to the lowest level since 1957. Despite this, however, the outflow of gold rose substantially. Holdings of gold certificates by the System were drifting down uncomfortably close to the legal minimum, and in March 1965 Congress repealed the 25 per cent reserve requirement against deposits in Federal Reserve Banks.

Inflation Contained

December 1965-December 1966

The year 1966 was one of the most turbulent and eventful in the history of the Federal Reserve System. To deal with fast-changing conditions

and unprecedented circumstances, some new monetary tools were forged and put to use.

THE ECONOMY

In the early part of the year activity continued at a high and rising rate in nearly all sectors of the economy. As the year progressed, however, activity peaked or slowed in most sectors of the private economy. By year-end, inflationary forces were on the wane, and signs of a slowdown were widespread.

After several record years, automobile sales turned down in April. This was followed closely by a long and steep decline in housing starts. Industrial production leveled off and showed little change after August. Employment and business investment showed distinctly lower rates of growth in the second half. Retail sales registered a small absolute decline in the second half, in sharp contrast to personal income which continued upward. Inventories accumulated at an accelerating rate and reached very large proportions in the fourth quarter. Prices of industrial raw materials dropped rather sharply after midyear, and in the fall the earlier sharp advance in agricultural prices was reversed.

FISCAL ACTION Federal expenditures increased rapidly but irregularly, and the cash budget fluctuated sharply from deficit to surplus and back again. Defense expenditures ran far above estimates, but revised estimates and projections were not made public until late in the year, and then it soon became apparent that the deficit for fiscal 1967 would be much larger than was originally anticipated.

An increase in payroll taxes became effective at the beginning of the year. Shortly afterward Congress postponed two reductions in excise taxes enacted the previous year, moved up payment dates for the corporate income tax, and instituted graduated withholding for individual income taxes. One result of this was a very large increase in tax collections in the second quarter when there was a surplus (unadjusted) of \$10 billion in the cash budget for the quarter. This helped to hold down the cash deficit for the year ended June 30 to \$3.3 billion. Despite much discussion and many proposals, there was no general tax increase during the year. In September the

President, in an effort to moderate investment demand, initiated a program to reduce nondefense spending and asked Congress to suspend for a time the 7 per cent investment tax credit and the provision for accelerated depreciation on buildings.

MONETARY POLICY

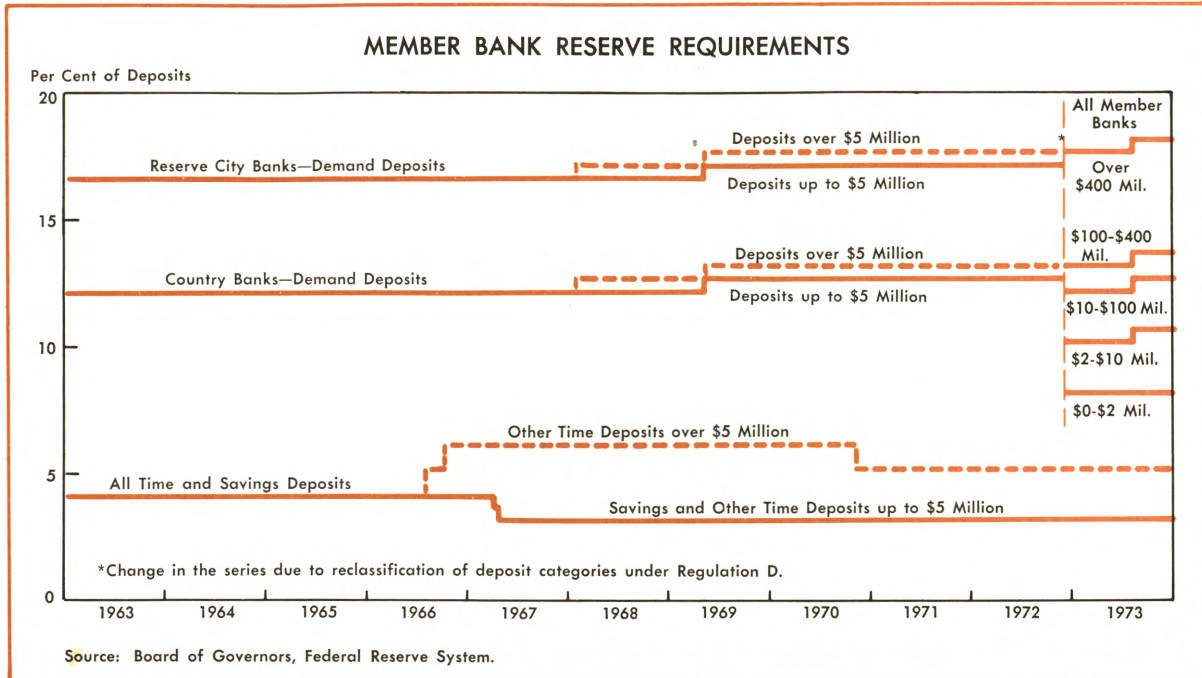
BACKGROUND Activity in the area of monetary policy was intense throughout the year. In an effort to ease the transition to the higher discount rate, the System for a time supplied reserves more liberally. As a result total reserves, bank credit, and the money supply increased faster than before. Business loans in particular grew very rapidly. At the same time, interest rates, bank lending rates and rates paid on CD's rose rapidly. The higher market and bank rates quickly diverted funds from thrift institutions, causing an acute shortage of mortgage funds and a sharp decline in residential construction. A little later, banks, under pressure to make business loans, began to liquidate investments, especially municipal securities, which threatened the stability of security markets. Much of what the System did during the year represented attempts to: (1) slow down the expansion of credit; (2) provide some relief to the mortgage market; and (3) avoid the development of additional pressures in the capital market.

REGULATION Q CEILINGS The ceilings on time deposits under Regulation Q were in this period developed into a complex and rudimentary tool of monetary policy. Banks, especially large money market banks, responded to the pressure to make business loans by pushing up the rates they paid on negotiable CD's. This had the dual effect of draining funds from smaller banks and thrift institutions and shielding the larger banks from the effects of monetary restraint. The funds thus obtained went mainly into business loans, which were used largely to finance fixed investment and increases in inventory, both of which were expanding very rapidly and thereby contributing to the inflationary buildup. In the meantime many smaller banks were competing for funds by issuing various kinds of small CD's, savings certificates, and other instruments bearing rates higher than the rate on savings deposits.

As CD rates approached the 5½ per cent ceiling, the large banks continued to issue more and more CD's, the amount outstanding reaching a peak of \$18.6 billion in August. The banks apparently were confident that, as in the past, the ceiling would be raised when going rates approached it. But this time it was different. In July the Board of Governors **reduced** the ceiling on "multiple-maturity" CD's from 5½ to 5 per cent. In September, under newly enacted legislation, the Board differentiated among CD's by size and reduced from 5½ per cent to 5 per cent the ceiling on time deposits under \$100,000. By this time it was clear that the ceiling on large CD's would not be raised. Secondary market rates on most Treasury bills and other short-term market instruments including outstanding CD's had gone far beyond 5½ per cent and many banks were able to roll over only parts of maturing CD's. The amount outstanding started down and by the end of November stood at \$15.5 billion. Thus the authority to set maximum rates on time deposits became an auxiliary tool of monetary policy through its ability to influence the flows of funds.

RESERVE REQUIREMENTS The Board also used its power to set reserve requirements in its efforts to cool the competition for time deposits and related liabilities and to restrain the expansion of bank credit generally. In June it raised from 4 to 5 per cent and in August to 6 per cent reserve requirements against time deposits, other than savings deposits, in excess of \$5 million at each member bank. The two increases added an estimated \$870 million to member bank reserve requirements. A number of banks had begun to issue short-term promissory notes that had many characteristics of time deposits. In June the Board ruled that such notes and similar instruments were subject to the same reserve requirements and interest ceilings as time deposits.

MORAL SUASION AND DISCOUNT ADMINISTRATION By the spring of 1966 interest rates were rising rapidly, and most short-term rates were above the discount rate. Business loans by member banks were rising at an unprecedented rate. For several reasons the System did not wish to raise the discount rate, but instead used moral suasion to hold down bank borrow-



ing. First, the president of each Reserve Bank conferred with a small number of leading bankers in his district and solicited their cooperation in keeping discounting to a minimum.

But pressure for business loans was intense, and those loans continued to expand very rapidly. By August many banks began to lose funds through their inability to roll over CD's. They ceased buying municipal bonds, and some began to sell investments. The investment market was threatened with a crisis. On September 1 each Reserve Bank sent a letter to all its member banks asking them to curtail the expansion of business loans and to avoid further substantial reductions of investments. In return, it was noted that banks which followed such a program might at times need discount accommodations for longer periods than usual. This admonition, plus the decline of CD's because of the operation of the interest rate ceiling, contributed to a sharp slowing in the growth rate of business loans, and the expansion of bank credit was halted. The September 1 letter was rescinded in late December.

THE DISCOUNT RATE As interest rates rose ever higher, there was considerable sentiment for

a further increase in the discount rate. During the summer of 1966 five Reserve Banks proposed such an increase. The Board recognized that several factors suggested such a move but decided that on balance it was not warranted and disapproved the proposals.

OPEN MARKET OPERATIONS Despite the several tools fashioned to implement monetary policy, open market operations remained a major instrument. As noted earlier, reserves were supplied liberally to facilitate the transition to higher interest rates after the discount rate was raised in December 1965. From June to November 1965, nonborrowed reserves rose at an annual rate of 2.8 per cent. From November 1965 through January 1966 the rate was 10.1 per cent. After that, however, reserves were supplied much more sparingly, and for the January-June period the rate fell to 1.7 per cent. In the following months reserve availability was reduced even further, and the annual rate registered a **decline** of 2.1 per cent from June through November. Over the whole period holdings of U. S. securities (unadjusted) rose by \$3.1 billion to a total of \$43.9 billion.

Economic Activity Eases December 1966-June 1967

THE ECONOMY

Economic activity eased in most sectors of the economy beginning in late 1966 and extending through the first half of 1967. A sharp slowdown in inventory accumulation was a major cause. The growth rate of GNP in current dollars was reduced by more than two thirds in the first quarter of 1967, while in constant dollars there was a slight absolute decline. In the second quarter both growth rates increased significantly but remained well below the rates of 1965 and 1966. Total employment declined steadily from January through May for a drop of almost one million before rebounding in June. Unemployment increased little because the labor force was also declining until May. The rate of unemployment varied between 3.6 and 3.8 per cent before rising to 4.0 per cent in June. The work-week in manufacturing was shortened substantially, holding down unemployment; but, even so, factory employment declined by some 325,000. Industrial production fell by 2.3 per cent from December to June, and the rate of utilization of manufacturing capacity dropped from 89.8 per cent in the fourth quarter of 1966 to 84.7 per cent in the second quarter of 1967. Wholesale prices showed a small net decline between December and April and then rose rather sharply in May and June. Consumer prices advanced at a slower pace until May when they moved up more rapidly.

FISCAL ACTION In view of the large current and prospective Federal deficits it was generally agreed that some fiscal restraint would be needed during the year. In the budget for fiscal 1968 the President recommended substantial increases in defense and other expenses and, specifically, increases of \$6.2 billion in social security and related benefits and \$1 billion in civilian and military pay. On the revenue side he recommended a 6 per cent surcharge on individual and corporate income tax liabilities and other minor tax charges to make a total tax increase of \$5.8 billion. Proposed also were increases in postal rates to produce some \$700 million, which would cut the postal deficit about in half. None of these proposals had been acted on by the end of June.

MONETARY POLICY

BACKGROUND This period featured one of the most massive creations of reserves in the history of the System. As soon as signs of easing appeared, the System, in November, switched to a policy of moderate ease. That became aggressive ease in the first quarter and then tapered off somewhat in the second. All interest rates fell sharply in January, rose in February, and declined irregularly in most of March. From late March, short-term rates continued downward, while intermediate-term and long-term rates started a long rise that, pushed by very large new security offerings in the capital market, took most of them to near their 1966 peaks. Bill rates jumped sharply at the end of June, but most other short rates remained relatively low. Bank borrowing of over \$600 million in November dropped to less than \$100 million in June, while net borrowed reserves of more than \$200 million gave way to free reserves of over \$250 million.

OPEN MARKET OPERATIONS The major vehicle of monetary policy in this period was open market operations, which were conducted on a very large scale. Nonborrowed reserves declined moderately from May through October 1966. After rising a little in November and December, they soared upward at the phenomenal annual rate of 26.9 per cent in the first quarter of 1967. This was nearly four times the growth rate that prevailed during the recession of 1960-61. In the second quarter the growth rate dropped by almost half to 14.4 per cent. System holdings of U. S. securities increased by \$2.9 billion to a total of \$46.2 billion. From May 1960 to June 1967 these holdings rose by a little more than \$20 billion.

RESERVE REQUIREMENTS In March 1967 reserve requirements against savings deposits and the first \$5 million of other time deposits in any member bank were lowered from 4 to 3 per cent. It was estimated that this reduced total required reserves by about \$850 million, mostly at country banks. One reason for the move was to make more mortgage funds available.

THE DISCOUNT RATE Early in April all Reserve Banks reduced their discount rate from 4½ to 4 per cent.

Inflation Reappears *June 1967-December 1968*

This was a turbulent period, both in the domestic economy and in international financial markets. In the second half of 1967 the economy began to recover from the first half doldrums, and the rapid pace of expansion continued through 1968. Inflationary pressures reappeared, and by mid-1968 some prices were rising at rates not seen since the Korean War. There were three major international financial crises during this period.

THE ECONOMY

The entire period from mid-1967 through 1968 was one of strong expansion, with GNP in current dollars increasing at an annual rate of about 9 per cent. This upsurge in activity was accompanied by substantial price rises, however, and growth in real GNP was just under 5 per cent per year. Inventory rebuilding contributed much of the strength in the second half of 1967, with final sales growing at a slower pace than in the first half. Residential construction was also an important source of strength as the housing industry staged a strong recovery from the depressed levels of early 1967. The expansion became more broadly based in 1968, however, although the strength of particular sectors varied from time to time. Residential construction leveled off after the first quarter and showed little growth until late in the year. Federal Government spending on goods and services rose strongly through the first half, tapered off sharply in the third quarter, and increased very little in the fourth quarter. Consumer spending grew enormously through the first three quarters, but increased at a considerably slower pace in the fourth quarter.

The economy was operating at a high level at the beginning of this period of expansion. The unemployment rate for civilian workers stood at 3.9 per cent in June 1967, and over the next year and a half it rose above 4 per cent in only two months. It was below 4 per cent throughout 1968 and at the end of that year stood at 3.3 per cent, a 15-year low. It is not surprising, therefore, that inflation became a serious problem. From December 1967 to December 1968, the consumer

price index rose 4.7 per cent, while wholesale prices rose about 2.8 per cent.

The economy expanded strongly throughout 1968, but in the fourth quarter the broadly based expansion of earlier months was changed into one based primarily on business spending. Consumer spending, which had grown at an average annual rate of about 10 per cent in the first three quarters, increased only 4.2 per cent, and spending on durable consumer goods did not increase at all. The increase in Federal Government expenditures was far below the gains of earlier quarters. Business fixed investment, on the other hand, increased at an annual rate of more than 18 per cent, while inventory accumulation rose from \$7.5 billion to \$10 billion.

International developments had an important bearing on policy during this period. In November 1967, the parity of the British pound was reduced from \$2.80 to \$2.40. This was followed by a run on gold, and over the next four months the United States gold stock fell more than \$2¼ billion. As a result, the gold policies of the major countries were changed by creating a two-tiered market for gold. The French franc was greatly weakened in the summer of 1968 by social unrest in France, and by late fall the weakness of the franc and the pound led to a belief that the German mark would be revalued upward. A massive speculative movement of funds began, and in the next few weeks the German central bank gained billions of dollars in reserves. The governments of France, Germany, and the United Kingdom made a number of policy changes to meet this situation but there were no changes in exchange parities.

FISCAL ACTION The Federal budget moved into heavy deficit in the first half of calendar 1967 as receipts leveled off and expenditures rose sharply. In early 1967, the President had asked for a 6 per cent surcharge on income taxes to become effective in July, but because of the slowing in economic activity this request was not pressed. In fact, the Administration requested, and Congress granted, a restoration of the investment tax credit. Shortly after midyear, however, with the economy again showing signs of overheating and the budget deficit promising to reach massive proportions, the President urgently repeated his request for a surtax. This met strong

opposition in Congress, and eventually a major deadlock developed over demands by Congressional leaders that any tax increase be accompanied by a reduction in spending. This deadlock was not resolved until June 1968, at which time the Revenue and Expenditure Control Act of 1968 was enacted. This Act imposed a 10 per cent surcharge on income taxes and set a ceiling on certain Federal spending for fiscal year 1969. Several changes were made in Social Security taxes and benefits during this period. In January 1968 the maximum income subject to the tax was raised from \$6,600 to \$7,800, and in March the scale of benefits was substantially increased. The deficit in the Federal budget declined sharply in the second half of calendar 1968.

MONETARY POLICY

BACKGROUND By mid-1967 the rapid improvement in the economy suggested the need for moderate restraint in place of the policy of aggressive ease that had been followed in the first half. Exceptionally heavy demands on credit markets and uncertainties as to the course of fiscal action caused interest rates to rise throughout the second half. In the absence of any additional fiscal restraint, and with the devaluation of sterling, the Federal Reserve System moved toward monetary restraint in late 1967. In the early months of 1968, however, it became obvious that further restraint was needed. The international financial system was experiencing a crisis, domestic financial markets were marked by a high degree of tension, while inflationary pressures gathered momentum. Monetary policy bore the entire burden of economic stabilization in the first five months of 1968 and the Federal Reserve used all three traditional monetary controls to restrain the booming economy. Agreement on a fiscal package in May led to expectations of reduced credit demands and a relaxation of monetary policy. This brought an easing in credit markets and a downward movement in interest rates, which the Federal Reserve accommodated. The impact of the fiscal restraint was much slower than had been expected, however, and economic activity continued to advance at a rapid pace. Credit demands pressed against the available supply, and interest rates rose to new highs. In the face of sharp upward price movements and

evidence of a growing inflationary psychology, the Federal Reserve System moved in late 1968 to a tighter policy stance.

OPEN MARKET OPERATIONS From July through mid-November 1967, open market operations supplied reserves at a fairly rapid pace to meet growing credit demands. Following the November devaluation of sterling and the ensuing increase in the Federal Reserve discount rate, however, open market operations were used first to facilitate orderly market adjustment to these developments and then to bring about firmer conditions in money markets. As a result, nonborrowed reserves, which had risen sharply from July to mid-November, declined in December. Through the first five months of 1968, open market operations were used in conjunction with other policy tools to maintain pressure on bank reserve positions, and at the end of May 1968 nonborrowed reserves were below the end-November 1967 figure. Following passage of the fiscal package, and in the face of heavy demands on credit markets, open market operations supplied reserves at a rapid pace in the third quarter, with nonborrowed reserves increasing at an annual rate of more than 13 per cent from June to September. Open market operations became increasingly restrictive in the fourth quarter and although total reserves increased at about the third quarter pace, member banks were forced to obtain more of these reserves through the discount window. Borrowings rose from an average of less than \$500 million in September to about \$750 million in December, while nonborrowed reserves rose at a 3 per cent annual rate over the same period.

THE DISCOUNT RATE Frequent use was made of discount rate changes during this period. In November 1967 the rate was raised from 4 to 4½ per cent, mainly in response to international developments, but the increased pace of domestic economic activity and the rising level of interest rates also made this move desirable. The speculative run on gold markets reached the crisis stage in March, and as part of the response to this situation the discount rate was raised to 5 per cent. In spite of changes in the international monetary system, however, foreign exchange markets re-

mained tense and domestic inflationary pressures gathered strength. These conditions, together with the deadlock over fiscal policy, contributed to a high degree of uncertainty in domestic financial markets. In mid-April the discount rate was raised to 5½ per cent, the highest it had been since 1929. Following enactment of the fiscal legislation and the subsequent easing in interest rates, the rate was reduced to 5¼ per cent. This was mainly a technical adjustment, however, and in the face of continued strong inflationary pressures the rate was moved back up to 5½ per cent in December.

RESERVE REQUIREMENTS An increase of ½ percentage point in the reserve requirement against demand deposits in excess of \$5 million was announced in late December 1967, to become effective in January 1968.

REGULATION Q At the time of the discount rate increase in April 1968, Regulation Q ceilings were raised on all but the shortest term negotiable time certificates of deposit in denominations of \$100,000 or more. This action was taken to preclude a large runoff of CD's at commercial banks as yields on market instruments rose. When the Federal Reserve System returned to a tighter monetary policy late in the year, however, the Regulation Q ceilings were not raised. The resulting decline in CD's added to pressures on reserve positions of commercial banks.

The Battle Against Inflation December 1968-December 1969

By the end of 1968 inflation had become the most urgent problem facing economic policymakers. To meet this threat, restrictive monetary and fiscal policies were followed throughout 1969. By the end of 1969, real economic growth had come to a halt, but inflationary pressures remained strong. The disequilibrium in the balance of payments continued to be a major unresolved problem for the United States.

THE ECONOMY

Through the first three quarters of 1969 growth in current dollar GNP continued at about the

same rate that had been recorded in the second half of 1968, but as the year progressed price increases accounted for an ever larger part of the GNP gains. Growth in real GNP, therefore, fell from an annual rate of 2.4 per cent in fourth quarter 1968 to 2.0 per cent in third quarter 1969. The effects of the restrictive economic policies became even more evident in the fourth quarter, however, with nominal GNP rising only at a 3.3 per cent rate and real GNP declining slightly. Business spending on fixed investment was a major factor in the 1969 expansion, with the increase for the year about double that for 1968. Growth in personal consumption expenditures remained fairly strong throughout the year, but spending on durable consumer goods leveled off in the second half. Residential construction was strong in the first quarter, but housing starts, after peaking at an annual rate of 1.7 million units in January, moved substantially downward to 1.4 million units in the fourth quarter. Industrial production peaked in September, then declined through the end of the year. Employment rose throughout the year, absorbing most of a very large increase in the labor force, and the unemployment rate rose from about 3.4 per cent in the first quarter to about 3.6 per cent in the final three months of the year. Prices rose at the fastest pace since the Korean War, with all of the major indices recording sharp gains.

Speculative pressures on exchange rates and record-high interest rates in the United States led to massive flows of funds across the international exchanges in 1969. The German mark was the object of heavy speculative buying until the exchange rate for the mark was allowed to float at the end of September. The rate was stabilized at a higher par value in October, after which there was a very heavy reverse flow of funds out of the mark into other European currencies and the dollar. The French franc, subjected to heavy speculative selling in the spring and early summer, was devalued in August. Tight monetary policy and strong demands for credit in the United States led to heavy borrowing in the Euro-dollar market by United States banks. Liquid liabilities of U.S. banks to foreign commercial banks and to other private foreigners increased \$8.8 billion in 1969, about \$7 billion of which was in the form of an increase in liabilities of U.S. banks to their foreign branches.

FISCAL ACTION The fiscal policy stance in 1969 was largely determined by the Revenue and Expenditure Control Act of 1968, which imposed a 10 per cent surtax on corporate and individual income taxes and provided for restraints on certain types of Federal expenditures. Originally, the Act was to be in effect until mid-1969. However, during 1969 the surcharge was extended at the 10 per cent rate through the end of 1969 and at a 5 per cent rate for the first six months of 1970. Social Security tax rates were increased on January 1, and the 7 per cent investment credit was eliminated effective April 21. These tax measures were accompanied by a determined effort to slow the growth of Federal expenditures. Consequently, the Federal budget, as measured in the National Income Accounts, shifted from a large deficit in early 1968 to a large surplus in 1969.

MONETARY POLICY

BACKGROUND In 1969 the System continued the course of monetary policy restraint initiated in late 1968. A variety of policy measures were used to subject the reserve position of the banking system to intense pressure. As a result the growth in total member bank reserves, which had been very rapid in 1968, came to a halt.

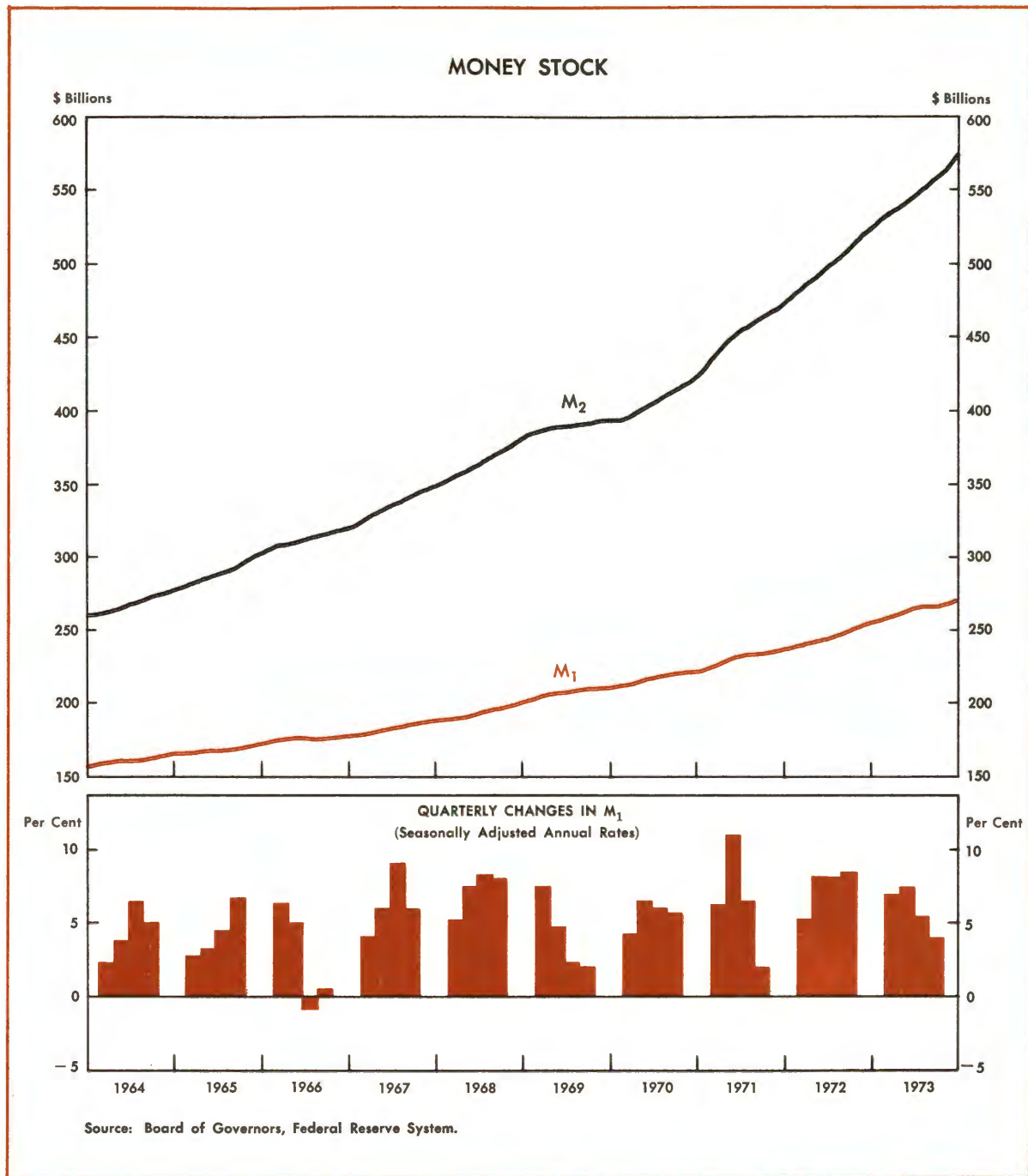
The narrowly defined money stock rose at an annual rate of about 5 per cent in the first half, but in the second half the rate of increase was only slightly in excess of 1 per cent. Total member bank deposits declined over the course of the year as certificates of deposit at large commercial banks fell more than \$12 billion.

Pressure on the reserve position of the banking system combined with a very strong demand for credit to push interest rates to extremely high levels. The prime lending rate was raised three times during the year, reaching a level of 8½ per cent in June, and both short- and long-term market rates rose sharply. Since the maximum rates banks were permitted to pay on time and savings deposits were not raised, funds were withdrawn from banks (and thrift institutions) for investment in market instruments offering more attractive yields. Commercial banks, attempting to satisfy a very strong loan demand in the face of a net deposit outflow, employed a number of techniques (some new and quite in-

novative) for raising funds. Liquid assets were sharply reduced, member banks borrowed heavily at Federal Reserve Banks, and some banks engaged in outright sales of existing loans. Banks also sold earning assets with an agreement for subsequent repurchase. Borrowings by U.S. banks in the Euro-dollar market doubled in the first half of 1969 and by the end of June had reached \$14.3 billion. Faced with sharply higher interest rates in the Euro-dollar market and the prospect of a reserve requirement on at least part of such borrowings, banks sought increasingly to raise funds through the sale of commercial paper by bank holding companies, affiliates, and subsidiaries. The proceeds of such sales were transferred to the banks by the purchase of loans from them. Some of the actions of commercial banks, in attempting to acquire liquidity, created both regulatory and policy problems for the System.

OPEN MARKET OPERATIONS Throughout 1969 open market operations were used in combination with other policy tools to exert sustained pressure on the reserve position of the banking system. As a result, total member bank reserves increased at an annual rate of only 1 per cent in the first half, as compared to an 11 per cent rate in the second half of 1968, and then declined at a rate of 4 per cent in the last six months of the year. Nonborrowed reserves fell even more sharply, and by mid-year net borrowed reserves exceeded \$1 billion. The System injected net \$4.2 billion of reserves into the banking system during the year. This large expansion in the System's holdings of securities, during a period of very tight money, was necessary primarily to offset the effects of increases in reserve requirements against member banks' demand deposits and the imposition of marginal reserve requirements against liabilities to their foreign branches.

RESERVE REQUIREMENTS In the face of a continued strong expansion in economic activity and few signs of easing of inflationary pressures, the Board of Governors announced on April 3 a package of measures designed to underline the System's determination to resist inflationary pressures. An increase of ½ per cent in the reserve requirement against demand deposits at member banks was one part of this package. This action increased required reserves by about \$650 mil-



lion. In July, Regulation D was amended to assure that certain officers' checks issued in connection with transactions with foreign branches were included as deposits for purposes of computing reserve requirements. At the same time Regulations D and Q were amended to narrow

the scope of a member bank's liabilities under repurchase agreements that are exempt from those regulations. The amendments provided that a bank liability on a repurchase agreement entered into with a person other than a bank became a deposit liability subject to Regulations D and Q

if it involved: (1) assets other than direct obligations of the United States or its agencies or obligations fully guaranteed by them, or (2) a part interest in any obligation. This action was believed to be necessary because it was thought that some banks were using repurchase agreements to avoid reserve requirements and the rules governing payment of interest on deposits. In August the Board of Governors amended Regulation D and Regulation M (Foreign Activities of National Banks) in an effort to moderate the flow of foreign funds between U.S. banks and their foreign branches and also between U.S. banks and foreign banks. The Board removed a special advantage to member banks who had used Euro-dollars, which were not subject to reserve requirements, to adjust to domestic credit restraint. The amendments to Regulation M established a 10 per cent reserve requirement on net borrowings of member banks from their foreign branches to the extent that these borrowings exceeded the amount outstanding in a base period. A similar requirement applied to assets sold by domestic offices to foreign branches and to loans by branches to U.S. residents. The amendment to Regulation D established a 3 per cent reserve requirement on borrowings by member banks from foreign banks, up to an amount equal to 4 per cent of the member banks' deposits subject to reserve requirements. A 10 per cent reserve requirement was imposed on borrowings in excess of that amount.

THE DISCOUNT RATE In April the Board of Governors announced approval of an increase of $\frac{1}{2}$ per cent in the discount rate. This action, which supplemented restrictive action in other policy areas, brought the discount rate to 6 per cent, the highest level in 40 years.

Another Difficult Period December 1969-August 1971

THE ECONOMY

This was another turbulent period, both in the domestic economy and in the international exchanges. Throughout 1970, the pace of economic activity was slowed by the tight anti-inflationary monetary and fiscal policies that had been pursued in 1969. At the same time, the economy was buffeted by the reorganization of one of the coun-

try's largest corporations and by a long strike in the automobile industry late in the year. Real output declined slightly in 1970, unemployment rose sharply, while prices continued upward under strong cost pressures. Industrial output fell about 4.8 per cent during the year, with declines centered in defense products, consumer durable goods, and business equipment. The reduction in defense production was especially sharp, more than matching the decline in real GNP. Production rebounded sharply in the first quarter of 1971, with real GNP rising at an 8.0 per cent annual rate. In the second quarter, however, the growth in real GNP fell to less than half the first quarter gain. Unemployment remained high, and there were few signs of moderation in the inflation rate.

The economy followed a somewhat erratic course over the entire period. In the first quarter of 1970 the level of activity continued the decline that had marked the fourth quarter of 1969, with real output falling some 3.0 per cent. Real output rose slightly in the second quarter, however, and this was followed by a slightly larger gain in the third quarter. These gains were realized in spite of the reorganization of the Penn Central Railroad in the second quarter, a development that almost precipitated a liquidity crisis and severely damaged business confidence. Indeed, by the third quarter there was reason to believe that the economy was beginning to recover from the mild downturn that had marked the last quarter of 1969 and the first quarter of 1970. The two small consecutive quarterly increases in real output, combined with favorable movements in a number of economic indicators, led many economists to conclude that a recovery was in progress. These hopes were dashed in the fourth quarter, however, by the depressing impact of the two-month strike against General Motors Corporation. Current dollar GNP rose less than \$5 billion in the fourth quarter, compared with a \$15 billion gain in the third, and real GNP declined at a 4 per cent annual rate. It is difficult to estimate precisely the extent to which total output was reduced by the strike, but the Council of Economic Advisers estimates that the strike's total impact was about \$14 billion. The end of the strike in late 1970 was followed by a strong upsurge in production in the first quarter of 1971, with real GNP rising at an 8.0 per cent annual rate. This strong gain was

largely the result of the rebound in auto production and sales following the end of the strike, however, and the growth of production soon fell to a more moderate pace. The increase in real GNP in the second quarter was less than half the first quarter gain, despite a strong rise in residential construction and the stockpiling of steel inventories in anticipation of a possible strike later in the year.

Weakness was broadly distributed throughout the economy for much of this period. A rapid increase in disposable income in 1970 was accompanied by a sharp rise in the savings rate and a slowing in the growth of consumer spending, with most of the weakness centered in the durable goods sector. Spending on consumer durables was fairly weak through the first three quarters of 1970 and declined sharply in the fourth quarter as a result of the GM strike. In the first quarter of 1971 disposable personal income rose sharply as a result of tax reductions, a Federal pay raise, and the increase in wages and salaries resulting from the resumption of auto production. Although the savings rate remained high, personal consumption outlays rose by more than a \$20 billion rate, over twice the average quarterly increase in 1970. Disposable income registered another strong gain in the second quarter, but the savings rate rose sharply and the growth in consumer spending tapered off. The long business fixed investment boom came to an end in 1970 as spending on new fixed capital rose only about 3½ per cent. Measured in dollars of constant purchasing power, fixed investment outlays actually declined in 1970. In the first half of 1971, business fixed investment outlays strengthened, but in real terms the improvement was small. Residential construction expenditures continued to fall through the first three quarters of 1970, but as funds became increasingly available in mortgage markets, residential construction turned up in the fourth quarter. The expansion in housing expenditures continued in 1971 at a vigorous pace as mortgage funds were in ample supply and interest rates declining. Federal Government purchases of goods and services declined in 1970 as a \$3 billion cut in defense spending more than offset a small rise in other expenditures. The decline in defense spending continued through the first half of 1971 almost exactly offsetting a modest rise in other types of spending.

The weakening of demand for goods and services was reflected in the degree of utilization of productive resources. Employment declined by 274 thousand between the end of 1969 and the end of 1970, while the civilian labor force increased by two million. As a result, the unemployment rate, which had remained at a very low level throughout 1969, rose sharply from 3.6 per cent to 6.2 per cent. The rise in employment resumed in early 1971, but through the first eight months of that year the growth in the labor force almost exactly matched the growth in employment and the unemployment rate hovered around 6.0 per cent throughout that period. Capacity utilization in manufacturing fell from 84.3 per cent in the fourth quarter of 1969 to 74.0 per cent in the final quarter of 1970. Although the utilization rate improved slightly in the first half of 1971, it only reached 75.1 per cent in the second quarter and dropped back to 73.2 per cent in the third.

The increase in idle capacity and unemployment did little to halt the rise in wages and prices, however. Although employment declined throughout much of 1970, upward pressures on wages continued strong. A large number of union contracts came up for renewal during the year and workers generally attempted to make up for past cost of living increases and to anticipate future increases. As a result, the rise in compensation per manhour in the private nonfarm sector averaged about 7.0 per cent in 1970. The rise in labor costs continued at a rapid pace in the first half of 1971. Average hourly compensation rose at an annual rate of 7.2 per cent, even higher than the 1970 pace. Large wage gains were widespread, with workers in construction, transportation, and public utilities chalking up especially large increases.

During the period January 1970 and August 1971 only modest progress was made toward slowing the pace of inflation. The Consumer Price Index rose 5.5 per cent from December 1969 to December 1970, compared to a 6.1 per cent rise in the comparable period in 1969. The rate of increase in consumer prices fell to a 3.8 per cent annual rate through the first eight months of 1971, but this improvement largely reflected a sharp decline in home mortgage rates. Wholesale prices rose 2.3 per cent over the course of 1970 following a rise of 4.7 per cent in 1969. Between

December 1970 and August 1971, however, the wholesale price index rose at a 5.1 per cent annual rate.

The United States balance of payments deteriorated sharply over the period. In 1970, the balance of payments picture was dominated by a tremendous volume of short-term capital movements. The move toward an easier monetary policy in the United States brought about a large decline in short-term interest rates. As these rates fell relative to rates abroad and as funds became readily available in domestic markets, U. S. banks repaid part of their borrowings in the Euro-dollar markets. A large part of these dollar repayments flowed through the Euro-dollar market into foreign central banks, causing the U. S. deficit on the official settlements basis to exceed \$10 billion. The situation worsened in the first half of 1971 as the outflow of capital increased and the trade account slipped into deficit. During this period funds flowed into Germany in huge amounts as that country continued to pursue a relatively tight monetary policy. By the second quarter the market was speculating on another revaluation of the mark, and on May 10 the mark was allowed to float. This action was followed by a brief period during which pressures on the dollar were relaxed, but as evidence of the serious weakness in the U. S. balance of payments mounted, another and even more massive flow of funds began. In the first seven months of 1971 U. S. liabilities to foreigners soared some \$13 billion to reach a total of \$37 billion at the end of July.

FISCAL ACTION In response to the sluggish performance of the economy, the Federal Government maintained a substantially easier fiscal policy stance between January 1970 and August 1971. The net budget position as measured in the National Income Accounts shifted from a surplus of about \$7 billion in 1969 to a deficit of more than \$13 billion in 1970. Purchases of goods and services by the Federal Government declined for the first time in ten years, but Federal expenditures other than purchases rose a record \$17.6 billion. This increase was partly accounted for by a 20 per cent increase in grants-in-aid to state and local governments, a 15 per cent increase in Social Security payments, higher disbursements for the Medicare program, and a substantial increase in unemployment compensation. On the other side

of the ledger, the income tax surcharge was phased out in two steps in the first half of 1970. Largely because of this action tax receipts fell some \$5 billion in 1970, although receipts were also affected by the unusually small growth in taxable personal and corporate income. Federal outlays on goods and services showed little change in the first half of 1971 as further declines in defense expenditures were about offset by increased purchases of nondefense items. Grants-in-aid to state and local governments, higher Social Security payments, and increases in other transfer payments resulted in a rapid rise in other expenditures in the first half. At the same time, the increase in revenues was slowed by the sluggish pace of economic activity.

MONETARY POLICY

BACKGROUND By the end of 1969 it was apparent that economic activity had turned downward. Throughout 1970 and the first half of 1971, therefore, monetary policy was concerned with the problem of cushioning the downturn while continuing the fight against inflation. Although inflation was a continuing concern, policy was generally expansive over most of the period. There was some slight firming around mid-1971, however. The unusual turmoil in financial markets in the second quarter of 1970 and the repercussions of the long General Motors strike in the fourth quarter made the achievement of policy objectives much more difficult.

Changes in interest rates during this period were striking, with short-term market rates plunging sharply downward through 1970 and into the first quarter of 1971. They then reversed direction and moved briskly upward through mid-year. During the period of rapid decline, short-term rates generally fell about five percentage points with the commercial paper rate, for example, plunging from about 9 per cent at the beginning of 1970 to about 4 per cent in early 1971. Long-term rates also moved downward over the period, but the reductions were much smaller than those for short rates. The pattern of rate movements was not smooth over the period. Rates declined sharply in the first quarter of 1970 on evidence of the economic slowdown and a move toward monetary ease by the System, a development that was encouraged by a cut in the prime rate from 8½ to 8 per cent. The direction

of movement was reversed in the second quarter, however, as a result of growing uncertainties concerning the course of the economy and of monetary policy, repercussions from the Cambodian incursions and the accompanying domestic turmoil, and finally the disarray in financial markets following disclosure of the financial problems of the Penn Central Railroad. After mid-year, however, tensions in financial markets relaxed and the decline in interest rates continued through the year-end and into the early months of 1971. From mid-September 1970 to the end of December the commercial bank prime rate was reduced four times, from 8 per cent to $6\frac{3}{4}$ per cent. Between the end of 1970 and March 19, 1971, the prime was changed six times, with the rate falling in small steps to $5\frac{1}{4}$ per cent. Toward the end of the first quarter, however, concern over inflation and the rapid growth in the money supply caused a modest shift in the stance of monetary policy. In view of the continuing slack in the economy the System continued to supply reserves at a substantial rate, but it did so less readily than earlier in the year. This modest firming of monetary policy contributed to a rise in short-term rates that developed in the second quarter and continued into August. Most short-term market rates rose about two percentage points and the prime rate moved back up to 6 per cent on July 7.

A NEW EMPHASIS At its regular meetings the Federal Open Market Committee considers and evaluates a broad range of data bearing on the current and prospective course of economic activity. On the basis of this evaluation the Committee makes a decision respecting the appropriate posture of monetary policy for the weeks immediately ahead. It then becomes necessary for the Committee to instruct the Manager of the System Open Market Account, who acts as the Agent of the FOMC in buying and selling securities in the open market, concerning the day-to-day operations necessary to achieve the Committee's policy goals. These instructions are embodied in a document known as the Directive.

The operating variable on which these instructions have focused has changed from time to time. For many years the Manager was instructed to maintain or to achieve certain specified money market conditions, but even then the specific

money market variable used as an indicator of "money market conditions" varied from one time to another. This term has been defined to include such things as the Federal funds rate, the three-month Treasury bill rate, and the net reserve position of member banks. At one time, in carrying out instructions to maintain currently prevailing conditions in the money market, the Manager might place primary emphasis on the net reserve position of member banks; at another time the three-month Treasury bill rate might receive primary attention; and at still another time the focal point might be the Federal funds rate.

In 1966 the FOMC altered the Directive by adding a proviso clause stated in terms of the rate of growth of a selected aggregate, usually the bank credit proxy. That is, the Manager would be instructed to maintain or to achieve certain money market conditions provided the growth in bank credit did not deviate significantly from current projections. If the growth in bank credit did exceed or fall short of projections to a significant degree, the Manager was expected to make appropriate changes in money market conditions. Hence, the addition of the proviso clause to the Directive explicitly recognized the current behavior of a monetary aggregate as an important intermediate target variable in the implementation of monetary policy.

In 1970 the form of the Directive was again changed to place even greater emphasis on the aggregates as a target variable. In the new Directive the FOMC instructed the Manager to conduct open market operations with a view to maintaining money market conditions consistent with achieving a desired growth in money and bank credit over the months ahead. While the Directive itself specified the desired growth rate in very general terms (e.g., a "moderate" or "modest" growth in money and bank credit), the discussion preceding its adoption always made clear to the Manager the specific growth rates desired.

The 1970 action on the Directive represented a change in emphasis rather than a sharp break with the past. The FOMC had been concerned with such aggregates as total reserves, bank credit, and the money supply long before the 1970 change; and it continued to be concerned with interest rates, net reserve positions, and other indicators of money market conditions after the change. Indeed, the Desk continued to use

money market conditions as operating guides in attempting to achieve aggregate targets. Moreover, the Committee has at times relegated the aggregates to a subordinate position when conditions in financial markets seemed to warrant it. The Directives issued during the period of turbulence in financial markets in May and June 1970, for example, emphasized the importance of moderating pressures on financial markets. At the same time, however, the Manager was directed to continue to pursue the longer-run objectives of moderate growth in money and bank credit, to the extent that this was compatible with the goal of moderating pressures on financial markets.

TURBULENCE IN FINANCIAL MARKETS In May and June of 1970 financial markets were shaken by a series of developments that threatened to precipitate a liquidity crisis. Underlying the instability in financial markets were the very heavy corporate demands for long-term funds, uncertainties as to the effectiveness of anti-inflation policies, and growing doubts concerning the financial positions of some important corporations. In early May the Cambodian incursion and the accompanying unrest in the United States served to aggravate the already uneasy situation in financial markets. Interest rates rose sharply, especially long-term rates, and the success of the Treasury's May financing was threatened. Because of these developments, the System gave primary emphasis to moderating the pressures on financial markets. Conditions in the financial markets calmed somewhat in early June, and yields on long-term securities moved down from the peaks they had reached in May. In late June, however, the Penn Central Corporation indicated it would be unable to pay off its maturing commercial paper. This brought immediate and intense pressure on the commercial paper market. Over the next three weeks the volume of commercial paper outstanding declined by some \$3 billion, setting off fears that many borrowers would be unable to roll over maturing paper and that a sharp credit stringency might ensue. Many corporations were trying to obtain funds in other markets to pay off maturing commercial paper, and much of this demand was centered on commercial banks.

The System moved promptly and effectively to prevent the development of a liquidity crisis by

making it possible for banks to provide loans to credit-worthy corporations. The Board of Governors suspended Regulation Q ceilings on large-denomination CD's with maturities of 30-89 days. This enabled banks to acquire funds that investors were reluctant to invest in money market obligations and to channel them to borrowers who needed them to pay off maturing commercial paper. At the same time, open market operations were used to assist the banking system to meet the overall increase in credit demands, and the Federal Reserve Banks informed member banks that accommodation would be available at the discount window in support of loans to credit-worthy borrowers who were unable to roll over maturing commercial paper. Following these actions, the scramble for liquidity subsided, and financial markets calmed.

OPEN MARKET OPERATIONS The System relied heavily on open market operations in moving toward an easier monetary policy stance in 1970 and in early 1971, but began to supply reserves more reluctantly in the second quarter of 1971. Between December 1969 and August 1971, total reserves increased by more than \$2.4 billion, with almost all of the growth occurring between June 1970 and May 1971. System holdings of U. S. Government securities rose almost \$9 billion over the entire period. Through the first 16 months of this period, nonborrowed reserves grew more rapidly than total reserves as member banks reduced their borrowing from the Federal Reserve from about \$1 billion at the end of 1969 to \$148 million in April 1971. Because of concern over the rapid growth of monetary aggregates in the face of strong inflation and a dramatic deterioration in the balance of payments, the System in the second quarter of 1971 began to supply reserves with somewhat greater reluctance. As a result, total reserves grew very little between May and August while borrowings at the Federal Reserve Banks rose strongly to the \$800 million level.

DISCOUNT RATE In mid-November 1970 the discount rate was reduced from 6 to 5¾ per cent, the first of five one-quarter point reductions designed to keep the rate in better alignment with rapidly falling short-term market rates. Other reductions occurred in December, two in January 1971, and one in February. The reduction in Feb-

ruary brought the rate to 4¾ per cent. Then in July 1971 the rate was raised to 5 per cent, a reflection of the moderate firming of monetary policy and the sharp run-up in market rates that had begun earlier in the year.

RESERVE REQUIREMENTS In June 1970 the Board of Governors amended Regulation D to prescribe the conditions that must be met in order for subordinated notes or debentures issued by member banks to be exempt from reserve requirements. Among other things, the amendment provided that in order to be exempt a subordinated note must have an original maturity of seven years or more and be in an amount of at least \$500. Formerly the exemption had applied if the maturity exceeded two years. The change was considered necessary because of evidence that member banks had used such obligations to acquire deposit-type funds.

Effective in the reserve computation period beginning October 1, 1970, the reserve requirement against time deposits in excess of \$5 million in each member bank was reduced from 6 to 5 per cent. At the same time, a 5 per cent reserve requirement was imposed on funds obtained by member banks through the issuance of commercial paper by their affiliates. The purpose of the latter action was to put bank-related commercial paper on the same footing with respect to reserve requirements as large negotiable CD's. The combined effect of these two actions was to reduce required reserves for the banking system by about \$400 million. In November the marginal reserve requirement applicable to Euro-dollar borrowings of member banks was raised from 10 to 20 per cent, with the increase to become effective January 7, 1971. Also in January, Regulation M was amended to permit a member bank to include within its reserve-free base the amount of purchases by its foreign branches of certain Export-Import Bank obligations. In April, Regulation M was again amended to include within such reserve-free bases the amount of purchases of certain U. S. Treasury obligations by a bank's foreign branches. The purpose of both of these changes was to encourage U. S. banks to retain their Euro-dollar liabilities and thus avoid the deleterious effect on the U. S. balance of payments of a rapid repayment of these borrowings.

REGULATION Q In January 1970 the Board of Governors announced an increase in the maximum interest rates payable by member banks on time and savings deposits. Maximum rates payable on savings deposits were raised from 4 to 4½ per cent, the first increase in this ceiling since 1964. In addition, there was a general realignment of ceilings on certificates of deposits, resulting in a scaling upward of ceilings on both large-denomination negotiable CD's and consumer-type certificates. This action was part of a coordinated move by the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Federal Home Loan Bank Board that resulted in increases in ceiling rates on deposits at both bank and non-bank thrift institutions. Its purpose was to make rates payable by these institutions more competitive with market rates and to enlarge the flow of savings into financial institutions. In June 1970 the Board of Governors suspended the rate ceilings on large-denomination CD's with maturities of 30-89 days. This was one of a package of actions taken by the System to deal with the unsettled financial markets that followed the filing of the Penn Central bankruptcy petition. Also in June, the Board of Governors amended Regulation Q to prescribe the conditions that must be met in order for subordinated notes or debentures issued by member banks to be exempt from interest rate ceilings. The provisions of this amendment were the same as those of the amendment to Regulation D, which was made at the same time and for the same purpose.

MARGIN REQUIREMENTS In May 1970 the Board of Governors lowered from 80 to 65 per cent the margin requirement for credit extended by brokers, dealers, banks, and other lenders to finance the purchase or carrying of stocks and from 60 to 50 per cent for credit extended by such lenders to finance the purchase or carrying of convertible bonds.

A New Approach *August 1971-December 1972*

At mid-1971 the U.S. economy was beset by a combination of seemingly intractable economic problems. The economy was growing, but not fast enough to eat into a substantial cushion of

unused resources. The unemployment rate remained near 6 per cent throughout the first half of the year and only about 75 per cent of manufacturing capacity was being utilized. Nevertheless, prices continued to rise at an unacceptable rate, accompanied by substantial increases in wages. At the same time, the U.S. balance of payments position was deteriorating rapidly. The trade balance fell sharply in the spring and a decline in interest rates relative to rates abroad encouraged a rapid outflow of short-term funds from the United States. By the second quarter these developments gave rise to speculative activities that greatly magnified the outflow of funds.

This combination of problems created something of a dilemma for economic policymakers. The use of traditional monetary and fiscal policies to speed up the rate of growth and reduce the margin of unemployed resources might well exacerbate the problem of inflation and cause further deterioration of the balance of payments. On the other hand, the use of these policies to slow the rate of inflation by reducing aggregate demand might only increase the slack in the economy and raise the already high unemployment rate even higher. Indeed, in view of the large amounts of unemployed resources and evidence of a substantial element of cost-push inflation in the economy, there was some question as to whether the inflation problem was amenable to the traditional monetary-fiscal policy treatment.

The apparent conflict in achieving the Nation's economic objectives led to a decisive change of policy. On August 15, 1971, the President announced a new economic policy. The most important elements of the new program were a 90-day freeze on prices, wages, and rents, to be followed by a more flexible system of controls in the second phase; suspension of convertibility of the dollar into gold or other reserve assets; imposition of a temporary surtax of up to 10 per cent on dutiable imports; proposal of a package of tax reductions designed to stimulate economic expansion.

The temporary freeze on wages and prices provided the time needed to set up the machinery to carry out the Phase II program that was to succeed the freeze. On October 7 the President announced the outlines of the Phase II program. The goal of the program was to reduce the rate of inflation to the 2 to 3 per cent range by the end of 1972. The controls were to cover the economy

broadly, they were to be mandatory, and were to be removed when, in the President's judgment, reasonable price stability had been restored. An Executive Order established the administrative machinery to develop guidelines and to make the decisions on wages and prices necessary to achieve this goal. A Cost of Living Council, consisting of high Government officials, was assigned the responsibility of establishing broad goals, determining the coverage of the control program, overseeing enforcement, and coordinating the anti-inflationary effort in line with overall goals. A Price Commission and a Pay Board were created to develop standards and make decisions on changes in prices and compensation.

THE ECONOMY

The new economic program brought about an improved outlook for economic activity. The strong measures to control inflation appeared to raise the level of business and consumer confidence. Prospects for consumer spending were favorably affected by such fiscal measures as the proposal to remove the excise tax on autos and to advance the date of certain personal tax reductions. The proposed investment tax credit provided encouragement for increased business investment spending.

The overall effect of the new economic program and related monetary and fiscal policy measures was quite stimulative. The effect on the economy was not immediate, however, mainly because economic activity in the third quarter of 1971 was dominated by the liquidation of inventories, particularly excess steel stocks that had been accumulated earlier in the year in anticipation of a strike. Final sales rose somewhat more rapidly than in the second quarter, however, largely because of a sharp increase in purchases of domestically produced autos after announcement of the new economic programs. Overall economic activity accelerated in the fourth quarter as inventory accumulation resumed, as outlays for residential construction continued to rise, and as the rate of business capital spending picked up. Real GNP grew at a 5.8 per cent annual rate in the fourth quarter, while the implicit price deflator rose only 1.7 per cent.

The strong surge in economic activity that began in late 1971 continued through 1972. Measured in current prices, GNP grew almost 10 per

cent for the year as a whole. The rise in the implicit price deflator was only 3 per cent, however, and real GNP recorded a hefty 6.4 per cent advance. This expansion was more than twice that for 1971 and the largest since 1966. Growth in real output was rapid in every quarter of 1972, with quarterly advances ranging from 6.3 per cent to 9.4 per cent annual rates. Moreover, the expansion in 1972 was broadly distributed, with all major sectors of demand except net exports contributing to the rise in GNP. A very large increase in gross private domestic investment, a step-up in Federal purchases, and a substantial expansion in consumer spending were the principal stimulative forces in the economy.

The surge in economic activity between August 1971 and December 1972 resulted in a significant improvement in the utilization of productive resources. The most marked improvement did not occur, however, until the final three quarters of 1972. More than three-quarters of a million additional workers found employment between August and December 1971, but the civilian labor force increased by almost exactly the same number and the unemployment rate remained virtually unchanged at around 6.0 per cent. The labor force continued to grow rapidly throughout 1972, but employment grew even more rapidly. As a result, the unemployment rate fell to 5.1 per cent by the end of 1972. The index of capacity utilization in manufacturing rose from 74.7 per cent at the time of the inauguration of the new economic program to 81.5 per cent at the end of 1972.

The performance of prices and wages during the period was somewhat mixed. There was a temporary bulge in the first few months following the termination of the wage-price freeze in November 1971, but after that there was some moderation in the rise of both prices and wages. Employee compensation increased 6.9 per cent over the course of 1972, compared with a rate of 8.1 per cent in the first half of 1971. Moreover, output per manhour was sharply higher in 1972 and the rate of advance of unit labor costs was reduced substantially by year-end. The average quarterly increase in the GNP implicit price deflator was 2.3 per cent (annual rate) over the final three quarters of 1972, compared with an average of 4.8 per cent for the first two quarters of 1971. Consumer prices rose 3.4 per cent over 1972 com-

pared with an annual rate of 3.8 per cent in the pre-control period of 1971. Wholesale prices, on the other hand, advanced very rapidly in 1972 propelled by an explosion of farm prices in the final three quarters.

The new economic program recognized the need for a substantial realignment of exchange rates between the dollar and other major currencies in order to restore the competitiveness of U.S.-produced goods in world markets. The first steps toward this goal were taken on August 15 with the suspension of convertibility of the dollar into gold or other reserve assets, imposition of a temporary surtax of up to 10 per cent on dutiable imports, and limitation of tax relief for capital expenditures to domestically produced capital goods. Following these actions, all major countries allowed the prices of their currencies to rise relative to the dollar, although there continued to be substantial intervention by foreign central banks. In mid-December, representatives of the major trading countries met in Washington and agreed to a significant adjustment of exchange rates. The agreement also provided for a widening of the intervention band to 2 $\frac{1}{4}$ per cent on either side of the new parities (it had been 1.00 per cent), and U.S. representatives agreed to ask Congress to raise the dollar price of gold from \$35.00 to \$38.00 per ounce. The 10 per cent surtax on imports was removed.

Despite the dramatic nature of these actions, they brought little immediate improvement in the U.S. balance of payments. The trade balance worsened as the deficit in 1972 totaled \$6.9 billion, more than \$4 billion larger than the one in 1971. The strong expansion in the U.S. economy in 1972 led to a strong expansion in the volume of imports. At the same time, prices of U.S. imports rose sharply, both because of the devaluation and because of a general increase in world prices, while export prices expressed in dollars increased much less. Thus, while merchandise exports rose 14 per cent in 1972, imports increased even faster. The enormous flows of speculative funds that caused so much havoc in 1971 were largely absent in 1972 and there was a modest reflow of private capital into the United States. As a result, the over-all balance of payments deficit on the official settlements basis dropped from almost \$30 billion in 1971 to just over \$10 billion in 1972.

FISCAL ACTION In the period between the announcement of the new economic program and the end of 1972 both fiscal policy and monetary policy were designed to achieve a more vigorous expansion of the economy and to bring about a more complete utilization of the Nation's productive resources. As part of the new program the Federal excise tax on automobiles was removed, the investment tax credit was reinstated at 7 per cent, and a reduction in the personal income tax that had been scheduled for later was advanced to January 1, 1972. In addition, programmed Federal expenditures were stepped up, mainly in the form of transfer payments and grants to state and local governments. As a result, Federal expenditures rose some \$26 billion in the calendar year 1972. Tax revenues soared, however, as a result of the upsurge in economic activity and because a change in tax-withholding schedules resulted in substantial overpayments on individuals' taxes in 1972. Consequently, the Federal deficit on a national income accounts basis declined to \$18.5 billion in 1972 from \$21.7 billion in the previous year.

MONETARY POLICY

BACKGROUND The Federal Reserve adopted a generally accommodative policy stance following the announcement of the wage-price freeze, and bank reserves were supplied somewhat more freely than earlier in the year. Apparently because of a shift in inflationary expectations, however, the demand for money balances declined. Consequently, growth of the monetary aggregates was quite moderate in the final months of 1971 and interest rates declined. By year-end longer-term rates were about 1 percentage point below their mid-August levels and short-term rates were down by about 1½ percentage points over the same period. The commercial bank prime rate dropped from 6 per cent in July to 5¼ per cent at year-end. This moderately stimulative monetary policy was continued through most of 1972. In the first half System open market operations provided for a rapid growth of nonborrowed reserves, but in the third quarter nonborrowed reserves declined slightly. Total reserves grew at a 10.6 per cent annual rate for the year as a whole, but most of the expansion in the second half came from an increase of more than \$1 billion in bor-

rowing at the discount window. Reflecting the rapid economic expansion and the strong demand for credit in 1972, short-term interest rates rose throughout most of the year. Long-term rates, however, remained fairly stable. The commercial bank prime rate continued to move downward in early 1972, but in early March it began to drift upward and through a number of small increases reached a high of 6 per cent in late December.

OPEN MARKET OPERATIONS System open market operations provided reserves at a rapid pace in the second half of 1971 and the first half of 1972. Federal Reserve holdings of U.S. Government securities rose more than \$6 billion between July 1971 and July 1972 and nonborrowed reserves rose about \$3 billion over the same period. Between July and year-end 1972, open market operations provided reserves much more reluctantly. In late 1972, however, open market operations were used to offset some of the impact on bank reserves of changes in Regulations D and J (discussed below).

RESERVE REQUIREMENTS In November 1972 the System announced a change in Regulation D that had the effect of restructuring the reserve requirements of member banks. A related change in Regulation J was designed to improve the Nation's check clearing system. Both of these changes had a significant impact on the reserve position of the banking system. Prior to the change in Regulation D member banks were divided into two groups (reserve city banks and country banks) for reserve purposes. Most banks in major financial centers were classified as reserve city banks and all others were classified in the country bank category. The change in Regulation D eliminated the geographically based classification of banks for reserve purposes and substituted a new system of graduated reserve requirements for net demand deposits. The new system, applicable to all member banks wherever located, is based solely on the size of a bank's deposits. Applicable reserve requirements ranged from 8 per cent on the first \$2 million of net demand deposits to 17½ per cent on deposits in excess of \$400 million (see chart).

Before the November 1972 change in Regulation J, most banks located outside Federal Reserve Bank or branch cities were required to remit funds

one or more business days after checks were presented for payment by the Federal Reserve. Most banks located in such cities, on the other hand, were required to remit on the same business day the checks were presented. The November 1972 change in Regulation J requires all banks to remit payment for checks presented by the Federal Reserve on the same day the checks are presented.

Most member banks experienced some reduction in required reserves as a result of the restructuring of reserve requirements against demand deposits. In the aggregate required reserves were reduced about \$3.2 billion. The change in Regulation J, on the other hand, resulted in a net reduction in member bank reserves of about \$2.1 billion. Implementation of these two changes came at a time of regular seasonal reserve needs, and open market operations were employed to smooth the transition. Consequently, the net reserve provision of about \$1.1 billion had only a

minimal impact on the reserve position of the banking system.

DISCOUNT RATE Changes in the discount rate were rather infrequent during this period. In November 1971 the rate was reduced from 5 per cent to $4\frac{3}{4}$ per cent, and in December it was reduced to $4\frac{1}{2}$ per cent. In both instances the changes were for the purpose of bringing the rate into better alignment with falling market rates.

MARGIN REQUIREMENTS In December 1971 the margin requirement for purchasing or carrying stocks and the required deposit on short sales were both reduced from 65 per cent to 55 per cent. In late 1972 it appeared that stock market credit might contribute to inflationary pressures and this action was reversed. The margin requirement on stocks and the deposit on short sales were returned to 65 per cent.

Limitations and Advantages of Monetary Policy

Establishing sound monetary policy is a task of herculean proportions. Central bankers cannot feed data into a computer and expect to get a monetary policy tailor-made to fit a particular economic situation. No matter how rich the experience and judgment of the policymakers, human error is still possible. And mistakes, once made, must be taken into account in future policy actions. An overly easy credit policy can cause inflation when expansion resumes. Anti-inflationary measures that are too strong can bring a period of expansion to a premature halt. Thus, central bankers—like men walking tightropes in high and shifting winds—must maintain their footing by leaning first one way and then another into the wind but never too far in either direction.

Limitations of Monetary Policy

What then are the limitations of monetary policy? Partly, they are the effects of powerful forces working in opposite directions. To some extent they result from the limited influence that monetary policy has over financial markets. In part, they are due to imperfect knowledge and to errors of human judgment.

PRICE-COST INFLATION The more competitive the economy, the more effective monetary policy can be. This is particularly true when business activity is running at near-capacity levels, and the System is trying to combat inflationary pressures. At such times, monopolistic pricing practices on the part of labor or business can push prices up from the supply rather than from the demand side. Sufficiently strong monetary policy can undoubtedly prevent some increases of this kind by dampening inflation psychology, but it is doubtful if it can completely cure the problem in a prosperous economy with strong monopolistic pressures. Conversely, continued monopolistic increases in wages and prices during recession tend to hinder the adjustments that lead to business recovery. To combat such pricing problems effectively, there must be additional measures designed to encourage competition.

DIFFERING FISCAL POLICY AIMS If the aims of fiscal policy—the manner in which the Federal

Government spends, taxes, and manages its debt—run counter to those of monetary policy, the two can to some extent offset each other. This is almost inevitable at times since the aims of monetary policy are largely economic, whereas those of fiscal policy are often political or social rather than economic. In a democracy it could not be otherwise, but nevertheless the net result may be an expansionary budget deficit when monetary policy—rightly or wrongly—is moving in the opposite direction. Or it may mean a lengthening of Treasury debt when the Federal Reserve is combating recession. In such cases, monetary and fiscal policy will partly offset each other.

SLIPPAGES IN THE FINANCIAL MECHANISM Even under the best conditions, monetary policy must contend with two types of “slippages” in the financial mechanism. First, commercial banks may not immediately expand or contract earning assets in response to changes in the availability of reserves. Second, even though banks act promptly, shifts in monetary velocity may partly offset changes in the money supply. Both kinds of “slippages” complicate the task of monetary policy, but their importance is overrated.

Incomplete use of additional bank reserves clearly calls for larger changes in reserves than would otherwise be necessary. This kind of special action is taken quite frequently. During 1960, for example, the System had to supply

more reserves than would have been needed had country banks responded more quickly to the release of vault cash. Only if banks did not respond at all would effective System policy be impossible.

A more common difficulty is the increase in the velocity of money ordinarily accompanying a restrictive monetary policy. Perhaps the most important cause is the liquidation by banks of short-term Government securities to meet rising loan demands. This leaves the money supply virtually unchanged since the banks merely substitute one form of earning assets for another, but it does tend to increase velocity by transferring bank balances from those who probably would not spend them as quickly—the purchasers of the securities—to those who spend them almost immediately—the new borrowers. Financial intermediaries, such as savings and loan associations or mutual savings banks, also can contribute to increases in velocity by raising interest or dividend rates to attract new funds for lending that might otherwise not have been spent as quickly and by lending the proceeds of Government security sales to borrowers who spend them immediately. Finally, velocity can be increased through security sales by nonfinancial institutions and through the adoption of various ways of economizing on business and personal cash needs.

Such increases in velocity mean that monetary policy must permit the money supply to expand more slowly, and at times to contract, in order to prevent spending from rising at an inflationary clip. It is sometimes argued that the money supply cannot undergo such restraint without unduly interfering with Treasury financing operations or upsetting securities markets through sharp increases in interest rates.

In practice, however, these fears have not yet been realized. System actions have been delayed at times by Treasury financing operations, but the System has not had to alter appreciably the direction and intensity of policy. Nor have securities markets been disrupted by the System's tightening actions. Increases in interest rates have actually been rather moderate—to no small degree because policy affects the availability as well as the cost of credit.

In fact, increases in velocity induced by a tightening policy perform several useful functions. First, by providing a means for financing outlays they act as a safety valve to prevent an inadvertent over-tightening of the money supply from becoming serious. Second, security sales resulting in increased velocity help transmit changes in the cost and availability of credit quickly throughout the entire credit mechanism. Finally, shifts in velocity make credit policy more equitable by enabling spenders to maintain those expenditures with the highest priorities by transmitting the effects of the policy to the more marginal outlays.

THE FORECASTING PROBLEM Monetary policy—like any discretionary stabilizing policy—necessarily involves judgments based upon incomplete evidence. Errors can occur for two reasons. First, delays in the availability of important business indicators make it impossible to know exactly how the economy is behaving at the moment. Second, policy-making involves judgments regarding the course of business activity in the absence of central bank intervention and the probable effects of various policy combinations. Errors of judgment can be minimized through experience and careful analysis, but they can never be eliminated completely.

Advantages of Monetary Policy

Despite its imperfections, monetary policy has several advantages over the alternative methods of stabilizing the economy—fiscal policy and direct controls, such as rationing and price control.

MONETARY POLICY IS IMPERSONAL In our market economy, most production decisions are made indirectly by spenders through their demand for goods and services. Only those things that spenders want will continue to be produced, only the cheapest methods of production will last, and only efficient producers can remain in business. Consequently, except for certain interferences, our limited supplies of land, labor, and capital goods are used to produce most efficiently those things spenders want most.

Direct controls obviously change all this. They, in effect, dictate what consumers can and cannot

do. Therefore, production decisions are made by the authorities, not by the market.

Fiscal policy is quite impersonal compared with direct controls, but variations in the direction and volume of taxation and spending alter the composition as well as the overall level of production. Those things the Government buys will be produced in larger quantities than otherwise would have been the case, and those goods and services taxpayers would have bought will be produced in smaller quantities.

In contrast, general monetary controls are never used to influence particular types of expenditures. A policy of restraint, for example, is designed merely to prevent **total** spending from increasing too fast. It leaves it to the market to decide which **particular** activities will be curtailed. These are generally those things that consumers and other spenders want least. They continue to buy the things they want most. Similarly, when easy money encourages spending, the additional outlays take whatever forms spenders prefer.

MONETARY POLICY IS FLEXIBLE Monetary policy is more flexible than most stabilizers. There are, of course, lags between policy decisions and the time the actions become effective, just as in the case of any stabilizing policy. There are other lags resulting from the lack of current information—lags affecting all types of discretionary stabilizers. But when it comes to reaching a quick decision, System policy-making machinery is admirable. Every three or four weeks—and sometimes more often—the Open Market Committee reaches some definite policy decision at its meeting. It may decide to stand pat; it may decide to act; but in any event it decides and initiates immediately the necessary implementing steps.

Discretionary fiscal policy actions involving changes in spending and taxation depend to a large degree upon Congressional action. Such decisions in a democracy like ours deserve and receive wide study and debate. Proper consideration thus requires time, and flexibility inevitably suffers. The so-called fiscal “automatic stabilizers”—primarily Federal income taxes and unemployment compensation payments—that tend to create budget surpluses during boom and budget deficits during recession do, however, act

more quickly. These clearly constitute a valuable, practical adjunct to monetary policy.

MONETARY POLICY IS FREE FROM DAY-TO-DAY POLITICAL PRESSURES In establishing the Federal Reserve System, Congress wisely gave it such independence as to enable it to act freely in the best interests of the economy. It spread the policy-making role throughout the System to avoid undue concentration of power; it provided for 14-year terms of office for appointed Board members, made them ineligible for reappointment after a full term, and staggered their terms of office; and it provided for the election of Reserve Bank presidents by their own boards of directors, subject to the approval of the Federal Reserve Board. The net result is a unique institution, able to base its day-to-day policy on economic nonpolitical grounds.

The System, of course, must answer to Congress and has only such powers as Federal laws give it. Within the limits of its broad powers, however, the System is free to use only economic considerations as guides to policy. Such can never be entirely the case with fiscal policy or direct controls, which are always significantly influenced by politics in our type of democracy.

The Net Result

When all its advantages are weighed against its limitations, where does monetary policy stand? What can it do, and what is it unable to do? Perhaps the best summary is the following testimony given by Chairman Martin of the Board of Governors before the Joint Economic Committee on February 2, 1960:

. . . It [monetary policy] cannot prevent monopoly. It cannot assure that the financial needs of all socially desirable activities are met without intervention by Government. It cannot be relied upon to cover Federal deficits. Alone, it certainly cannot assure either stability or growth.

What a correct monetary policy can do is to foster confidence in the dollar, so that our people can and will save and invest in the future with reasonable assurance that their plans will not be frustrated by irresponsible changes in the value of money.

